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U. S. War Dept.
REPORT

OF THE

SECRETARY OF WAR;

BEING PART OF

THE MESSAGE AND DOCUMENTS

COMMUNICATED TO THE

TWO HOUSES OF CONGRESS

AT THE

BEGINNING OF THE FIRST SESSION OF THE FORTY-SEVENTH CONGRESS.

IN FOUR VOLUMES.

VOLUME I.

**WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1881.**

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REPORT
OF
THE SECRETARY OF WAR.

WAR DEPARTMENT,
November 10, 1881.

To the PRESIDENT :

I have the honor to submit the following annual report of the administration of this department :

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES.

The actual expenditures under this department for the fiscal year ending June 30, 1881, were \$42,122,201.39.

The appropriations for 1882 were \$44,889,725.42.

The estimates for 1883 are \$44,541,276.91.

The estimates presented to me for revision included—

For armament of fortifications.....	\$720,000
Fortifications and other works of defense.....	4,186,500
Improving rivers and harbors.....	29,101,300
Improving Mississippi River, by commission	4,323,000
Public buildings and grounds in and near Washington	749,000
Surveys of lakes.....	20,000
	<hr/> 39,099,800

This amount has been reduced, on my revision, to aggregate \$10,689,000, which sum, if judiciously allotted by Congress, will be, in my judgment, a reasonable allowance for this class of expenses during the next fiscal year.

The remainder of the estimates includes salaries and expenses of the departmental civil establishment and amounts for the support of the Army, for armories and arsenals, and for miscellaneous objects. For these purposes the estimates for 1883 are \$33,852,276.91, being \$296,321.37 in excess of the estimates for 1882, and \$2,082,851.49 more than the appropriations for the current fiscal year. This increase grows out of apparent necessities in the public service, which are fully set forth by items in detail, accompanied with notes, in the book of estimates. While the estimates of expenses for this class show an increase, there is in the estimates of expenses for improvements, including rivers and harbors, a decrease which overbalances the difference, and makes the estimates for 1883 \$348,448.51 less than the appropriations for 1882.

THE ARMY.

The report of the General of the Army contains recommendations of the highest importance. He again calls attention to the public necessity of legislation authorizing the Army to be recruited to a strength of thirty thousand enlisted men, as provided by section 1115 of the Revised Statutes. As is remarked by the General, our companies are too small for efficient discipline and for economical service. There are in the Army four hundred and thirty companies, which are necessarily widely scattered over our vast domain, to guard property and to prevent, as far as foresight can, complications and troubles of every variety and kind, at one time protecting the settlers against Indians, and again Indians against the settlers. When these occur, re-enforcements have to be hurried forward from great distances, and always at heavy cost for transportation of men, horses, wagons, and supplies. This cost in the aggregate is probably more than sufficient to supply an increase of twenty per cent. of *private soldiers*, which will add little, if any, to the annual cost of the Army, and yet give great relief to our overtaxed soldiers. In the last ten years our frontiers have so extended, under the protection of our small Army, as to add at least a thousand millions of dollars to the taxable wealth of the nation. This protection has enabled emigrants to settle up remote parts of the country, and is a principal cause of the great prosperity which is felt throughout all parts of our vast domain.

It should be remembered that of the enlisted force of any army a large part, not far from fifteen per cent., is, for many causes, not available at any one time as a fighting force; so that the legislation recommended would, after proper allowances, give an actual combatant force of about twenty-five thousand men.

I concur most earnestly in his recommendation.

Whilst the troops have been kept very busy during the past year, no serious Indian or other war has occurred, but great progress has been made in collecting and locating Indians, hitherto hostile, on their proper reservations. Sitting Bull and his adherents, who had fled into British territory, are now held at Fort Randall, Dakota, as prisoners of war, and the Utes have been moved to a new reservation in Utah. A sudden outbreak of a part of the Apaches occurred in Arizona, and it was found necessary to re-enforce for a short time the usual garrisons in Arizona by a strong detachment from New Mexico. Some of the guilty Apaches are now held as prisoners for trial; some have escaped into Mexico, while the greater part of the tribe remain on their reservation at San Carlos, under their proper civil agent.

The General recommends that section 1232 Revised Statutes be amended so as to read:

SEC. 1232. No officer shall use an enlisted man as a servant, in any case whatever, without proper compensation, or without his own consent and that of his commanding officer.

It appears that in many remote places no servants can possibly be obtained, and officers must not only cook their own meals, but groom their horses, or violate the law as it now stands. It would seem clear that no officer can habitually do such work and properly supervise his company and command.

In addition to the means for extended practical instruction for officers now given at the Artillery School at Fortress Monroe, and the Engineer Establishment at Willets Point, New York, arrangements are so far made for a School of Application for the cavalry and infantry at Fort Leavenworth that it will probably be in operation before January next. There will be, habitually, a garrison of one company of artillery, four companies of infantry and four of cavalry, to which will be attached, for instruction, one officer of each regiment of infantry and of cavalry for a detail of two years. These will receive instruction in the military art, and then rejoin their proper regiments, to be succeeded by a similar detail every two years, so that in time the whole Army will thus be enabled to keep up with the rapid progress in the science and practice of war.

The Signal School at Fort Myer provides for the instruction of eight subalterns each year in that branch of knowledge; but as it takes five years thus to instruct one officer of each of the forty regiments, practical instruction in all the signaling which is essential to the Army is also taught at West Point, at Fortress Monroe, and will be at Fort Leavenworth, thus embracing the whole Army.

The earnest attention of Congress is called to the need of legislation to prevent intrusion upon Indian lands, especially from Kansas into the Indian Territory. A large military force, at great expense, now patrols the boundary line; the only penalty which can be inflicted upon the intruder being removal by force and a pecuniary fine, the magnitude of which is not of the smallest importance to him, its collection being impossible. Section 2148 of the Revised Statutes should be amended by providing for imprisonment as well as fine in such cases.

ADJUTANT-GENERAL'S DEPARTMENT.

The Adjutant-General urgently recommends that legislative authority be given for the employment of civilian clerks at division and departmental headquarters, to do the work now performed by persons enlisted in the general service, as it is called, who are in name soldiers, but in fact clerks. Such a measure would restore 147 men to active duty as soldiers, and they could be replaced, it is estimated, by 113 clerks employed at salaries the aggregate of which would be nearly \$20,000 less than now paid. This recommendation is approved, and I would also recommend a like enactment in respect to General Service clerks now employed in the War Department. The system grew out of the necessities of the war, and creates a certain amount of confusion, as "General Service" clerks, being nominally enlisted men of the Army,

are not borne on the clerical rolls. This clerical work must be had, but it ought to be performed by regular clerks.

The Adjutant-General also calls attention to a discrimination, in the matter of compensation, against the clerks under him, which would be corrected by the abolition of the class of "General Service" clerks, and a new arrangement such as is shown in his report, which I recommend.

The Codified Army Regulations, prepared under the direction of my predecessor, are now being issued.

The Adjutant-General recommends that the Secretary of War be authorized to make a proper allowance to officers on court-martial or military board duties, to enable them to meet the exceptional expenses caused by such duties.

The rapidly increasing number of calls from the Pension Office for information from the rolls of the Army, in connection with claims for pension, led to the formation by the Adjutant-General of a new branch in his office last April, designated as the "Enlisted Volunteer Pension Branch." By the act of March 3, 1881, twenty-five additional clerks of the lowest class, viz, at an annual salary of \$1,000, were authorized to be employed in this office, but their want of acquaintance with the *minutiæ* of Army rolls and records, and the consequent necessity devolving on the older clerks to devote much time to their instruction, has necessarily prevented the attainment of the highest results. The following table, however, is a gratifying exhibit of the labors of this branch and of other divisions of the office engaged in business relating to claims for pension, bounty, homestead grants, &c.:

Number of calls (from all sources):		
On hand October 1, 1880.....	31, 997	
Received during the year	150, 449	
	<hr/>	182, 446
Finished during the year		154, 342
		<hr/>
Remaining on hand October 1, 1881		28, 104

INSPECTOR-GENERAL'S DEPARTMENT.

The report of the Inspector-General shows that the accounts of all officers of the Army who have disbursed public moneys during the past year have been carefully examined, and the reports of balances verified.

Nearly all the military posts have been inspected during the year. The discipline of the troops is reported as very good. They are well armed and well fed and clothed.

Great attention has been paid to target practice, and marked improvement is noted. A regular competition is now established throughout the Army, prizes being given annually in military departments and divisions, and biennially after a contest between the best marksmen of the three military divisions.

The Inspector-General's corps of officers, now limited to five, is too small a number for the important duties which devolve on them. The Inspector-General must necessarily be stationed in Washington, and should have at least one competent assistant with him. There are three military divisions and nine departments, each of which ought to have an inspector-general. This would necessitate fourteen officers in all—an increase in this corps of nine officers, each of whom should have the right to employ one clerk, with the same compensation which is now allowed to paymasters' clerks.

BUREAU OF MILITARY JUSTICE.

The number of general court-martial records received in the Bureau of Military Justice during the year ending October 1, 1881, was 1,792, an increase of 249 over the receipts of the previous year. The record of cases brought before inferior courts, reviewed and filed in the offices of the judge-advocates of the different military departments during the same period, was 8,500, an increase over the previous year of 267 cases.

The Judge-Advocate-General refers briefly to the various military tribunals, and to the usual course of procedure by which their proceedings reach the Bureau of Military Justice for consideration, and in this connection invites attention to the fact that, while the Judge-Advocate-General is empowered by statute to receive and revise the proceedings of courts-martial, yet the Secretary of War, whose subordinate he is, has no statutory authority to give effect to reports or revisions in such cases, even though he should concur therein, and remarks that to this extent the law is defective.

In connection with the nature, quality, and quantity of the work to be performed, attention is invited to the fact that, in view of the interests involved, an adequate force of clerks, possessing in the highest degree both capacity and fidelity, is imperatively necessary, and that the present inadequate clerical force has necessitated the transfer of officers of the corps of judge-advocates to duty in the Bureau of Military Justice, while their services are much needed at the headquarters of the various military departments.

The necessity for suitable furniture to replace that now in use, which is worn out and rickety, and the great need for an appropriation sufficient to furnish the library, at present incomplete and antiquated, with text-books and reports of recent date, is fully set forth.

The duties of the Judge-Advocate-General and of the corps of judge-advocates are enumerated, and in view of the advisability of having an officer of the corps at each of the ten geographical military departments, and at the Military Academy as professor of law, the repeal of the law limiting the number of judge-advocates to four, and the organization of the corps on the same basis as the other staff corps of the Army, are recommended, this being the only corps in which there is no promotion, to serve as an incentive to duty. In all other branches of the service officers can look forward to reaching the rank of colonel, while in the

corps of judge-advocates all are of one rank—that of major—which has been held by its members for periods ranging from eight to nineteen years. It is not perceived why such a discrimination should exist against an expert corps, requiring in the exercise of its functions professional attainments of a high order, and I recommend appropriate legislation to remove it. With a properly organized corps, of sufficient strength to furnish each military department with one of its officers, it is believed that many trials by courts-martial could be avoided by thorough preliminary examination, and much expense to the government saved thereby.

Attention is invited to defects and omissions in the Articles of War (65–71 inclusive) relating to the arrest and confinement of officers and soldiers accused of crime, duration of confinement, copy of charges, and time of trial, being the only provisions of the Articles of War relating to this important portion of the criminal procedure before courts-martial, on account of the unjust discriminations involved and the inadequate provision for the subjects mentioned.

It is also recommended that the scope of the 91st Article be so enlarged as to provide for the taking of depositions in certain instances, to be used at the trial as secondary evidence, where, for any sufficient reason, primary evidence of the facts cannot be procured consistently with the public interests, the extended jurisdiction of courts-martial rendering it difficult, if not impossible, at times, to obtain the *viva voce* testimony of material witnesses at the time of trial.

Recommendations are also made for authority, under proper regulation, for the revision of charges before arraignment and plea; for compelling the attendance of witnesses in certain cases; for preventing the abuse of authority by non-commissioned officers; for amendment of the 72d Article of War, by expressly authorizing colonels commanding separate departments to appoint general courts-martial when necessary; for a penal sanction of the authority conferred upon a judge-advocate of a court-martial, by section 1202 of the Revised Statutes, “to issue process and compel witnesses to appear,” &c.; for authority for a judge-advocate, or other officer of a court-martial, to administer oaths to witnesses or other persons in trials by courts-martial; and for amendment of that portion of the 90th Article of War which requires the judge-advocate to prosecute, as well as to a certain extent to consider himself as counsel for the prisoner, in order to prevent confusion and misunderstanding.

Accompanying the report are extracts from the reports of judge-advocates of departments (or officers acting and performing the duties of those officers), embodying recommendations on various matters pertaining to their respective departments.

MILITARY PRISON.

The administration of the affairs of the military prison at Fort Leavenworth, Kans., during the past year has been in a marked degree successful.

During the fiscal year ending June 30, 1881, there were 373 men received into the prison and 273 discharged. But 1 death occurred during the year, and only 6 prisoners escaped during the same period. The actual number of men confined on June 30, 1881, was 447.

The board of commissioners have made the inspections required by law; have, at each visit, afforded the prisoners the fullest opportunity to make such representations or complaints as they desired to present for consideration; have carefully noted the character of the punishments imposed by the prison authorities for violations of the established rules and regulations, the methods and kinds of labor, the quality of food provided; and they have been fully satisfied, in all respects, with the condition and government of the prison. The governor, while on duty under his brevet rank of colonel, actually receives only the pay and allowances of his actual rank, viz, that of captain. Considering that his position demands the possession, in the incumbent, of administrative ability of the highest degree, combined with the rare mechanical powers required for the successful management of an institution embracing many and varied branches of industry, I most earnestly recommend that the local rank of colonel, with the pay and allowances of that grade, be attached to the office of the governor of the prison. This officer has a greater amount of labor and responsibility than any regimental commander. He governs and controls between 500 and 600 persons. Practically, he is at one and the same time the superintendent of a large manufacturing establishment, embracing diversified branches of industry, and the military director of all affairs within the prison.

I beg to renew the recommendation of last year that legislative authority be obtained to apply the earnings of the prison to its maintenance. A bill with this end in view was pending in the Senate last winter, and I sincerely hope it may become a law during the next session of Congress.

There were manufactured at the prison during the year 34,163 pairs of boots, 25,944 pairs of shoes, 4,356 corn brooms, 1,656 barrack-chairs, 110 arm-chairs, 100 chair-rungs, 220 chair-bolts, 1,263 packing boxes, 80 crates, 100 sets of four-mule ambulance harness, 75 sets of six-mule wagon harness, and, in addition to the above, all the doors, sashes, &c., for new buildings, and the work incident to the necessary repairs to buildings already erected. The prison farm produced a large quantity of vegetables, all from the labor of the convicts.

QUARTERMASTER'S DEPARTMENT.

The moneys appropriated for the service of the Quartermaster's Department during the fiscal year were \$13,857,187.57; the balances of former appropriations, remaining in Treasury at beginning of fiscal year, were \$1,027,815.68. These were applicable only to expenses incurred in prior years but not settled.

There were remitted to disbursing officers during the year, \$11,203,536.03; paid through the Treasury, \$718,205.13; carried to surplus fund, \$230,123.62; and there remained in Treasury, undrawn on June 30, 1881, \$1,705,296.04.

The propriety of allowing to the officers of the line who are placed on duty as acting assistant quartermasters some compensation for the great pecuniary responsibility, to say nothing of the labor, imposed by these duties, is again mentioned by the Quartermaster-General. Such an allowance as is by law granted to acting commissaries of subsistence under the same circumstances is recommended.

The difficulty arising in the exhaustion of the depot stock of clothing and equipage, mentioned last year, has continued to be felt, though in a somewhat less degree because, the appropriation being made earlier, at the last or short session, it was possible to make contracts earlier, and thus the deficiency of supply in the earlier months of the year was less felt. The need of a special appropriation, however, to provide a working stock to be placed in depot to meet emergencies and to provide for the spring and summer distribution to the Army, remains, and unless an appropriation for this purpose is granted this winter, the old difficulties will be severely felt again next season.

Under several joint resolutions of Congress, tents and camp equipage were loaned to various organizations during the year, at a cost, in expenses, damages to material, and losses, of \$2,038.31.

Helmets have been introduced both for officers and soldiers. For troops in severe climates buffalo coats, fur caps and gloves, and arctic overshoes are supplied by the United States. Their use has made campaigns possible without loss by frost in the severe climate of the Upper Missouri and the Canadian boundary.

The construction of 132 new military buildings by the Quartermaster's Department has been authorized during the year, at an estimated cost of \$240,000. They are at military posts in twenty-one different States and Territories.

Repair of existing buildings has been authorized to the extent of \$417,902; \$13,428 of the above sum have been devoted to new buildings for schools and chapels at military posts, under the law of July 28, 1866; and \$6,517 have been devoted to repair of wharves at military posts.

Of the \$75,000 appropriated for hospital construction, \$74,588 have been expended.

Seventy-six old buildings, no longer needed for the military service, have been sold, and their proceeds turned into the general Treasury balances.

With so many buildings under its charge, scattered throughout the country, there has been some loss by fire. Fourteen such fires have been reported, but, considering that the department is estimated to be in charge of 5,000 buildings, the losses have been comparatively small.

The new headquarters at Fort Snelling have been completed, excepting some of the minor buildings. The Quartermaster-General has lately inspected them, and reports them excellent buildings, of economical construction.

The Quartermaster-General renews his recommendation for the erection of a building for the safe-keeping of records of the executive departments not in frequent use. Such a building need not be costly; it should be fire-proof and safe, and so arranged that the records of the different departments could be stored in separate fire-proof rooms. There can be no doubt as to the value and economy of such a building, and the Quartermaster-General has submitted a design for such an one. An appropriation therefor has passed the Senate unanimously, but in the last hours of the late Congress it failed in conference.

Congress, at the last session, passed a law providing for the erection of a new building for the Pension Office. As the law imposed upon the Quartermaster-General of the Army the duty of selecting a site, subject to the approval of the Secretaries of War and of the Interior, he reports the progress made thereunder. It seems to have been the intention of the authors of this measure to provide, by the appropriation of \$250,000 which was made, for the purchase of a site AND for the erection of the building, but the omission, apparently an accident, of the word *and* in the law has prevented any attempt to construct a building, and the whole matter has therefore remained undetermined, and needs further legislative action. The Quartermaster-General has, under the law, performed his duty of selecting and submitting for approval a site; he has also submitted plans for such a building as he believes, on information, to have been intended by the authors of this law; but in consequence of the omission of the important word noted above, preventing the construction of such a building as was believed by the Secretary of the Interior and myself to have been actually intended by Congress, it was not thought advisable by us to select a site until further legislation is had.

There are eighty national military cemeteries declared and established under the law, in which there have been 318,859 interments. These are independent of the cemeteries at military posts, which generally cannot be considered permanent, being vacated on the abandonment of posts as the frontier passes beyond them.

It is expected that the public road from Vicksburg to the military cemetery will be completed this fall. Further appropriations are asked to complete the roadways to the Fort Scott and to the Chattanooga military cemeteries, as the sums granted by Congress were not sufficient for the completion of either.

An appropriation for repairing the road from the capital to the Arlington Cemetery is recommended. The Quartermaster-General renews his recommendation that this cemetery, containing 208 acres, in which few more military interments are probable in the future, be constituted and

established by law a national official cemetery for interment of officers of the government, members of Congress, and others in the public service, dying at Washington or elsewhere, whose friends may desire their interment in a cemetery maintained by the nation. There is space for this purpose. The cemetery is sufficiently remote from the city to be unobjectionable on the score of health, and yet near enough for easy communication. Being separated from the city by a great river, it is not liable to be encroached upon and ultimately destroyed by the growth of population.

Under the law of July, 1864, 3,813 claims for quartermaster's stores were investigated during the year by the agents of the Quartermaster's Department. Their amount as presented was \$2,287,729.22. The cost of this work was \$139,604.63. The total number of these claims on file for examination was 22,935, calling for \$12,034,750.29. Of these the Quartermaster-General reported to the Third Auditor 1,149 with recommendation for settlement at \$227,680.39, which is \$344,898.93 less than claimed. During the year 1,995 claims, calling for \$1,885,173.32, were rejected. The Quartermaster-General has not during the year been able to take up 2,018 other claims which had been prepared for such action. Thus, 5,162 cases were prepared during the year for adjudication.

The Quartermaster's Department moved, during the year, 46,658 persons, 10,355 beasts, and 136,632 tons of material.

Some of the railroads which purchased on credit, under executive orders, railroad material at the close of the war, continue in default.

Attention is called to the fact that, while appropriation has been made to pay land-grant railroads for service rendered in the years ending June 30, 1880 and 1882, no provision has been made in appropriations for paying for such service rendered in the year ending June 30, 1881. This inflicts loss upon those companies which have faithfully done their duty to the government during that and other years.

About 10,500 horses and the same number of mules are kept in the military service. The loss of animals during the year was 2,056 horses and 1,281 mules. The proceeds of sales thereof, deposited in the Treasury in the year, and not available under existing laws to replace those died, lost, or sold, was \$80,207.97. The average cost of 1,438 cavalry and artillery horses purchased during the year was \$125.12—total \$179,926.71. The cost of 1,006 mules and 29 draft-horses purchased for the trains was \$117,074.80; the average being for mules \$111.07 each, and for draft-horses \$183.79. Thus the sales of animals, worn out, produced about one-fourth of the cost of replacing them.

The duty of supplying lights to the Army, heretofore performed by the Subsistence Department, having been transferred to the Quartermaster's Department, contracts for mineral oil and for lamps have been made, and the first distribution thereof to the military posts is in progress. So far as can be at present estimated, the new method of light-

ing will cost about \$2,500 per annum more than the old. As the Argand burner used gives the light of sixteen candles, the comfort of the troops will be very much increased by substitution of mineral oil for candles. The *morale* of the troops is reported to have improved at posts where the new lights have been introduced. The men, being able to read without injury to their eyes, spend more time in rational amusements and less time at the sutler store, at the grog-shops, and in the guard-house.

The law which abolished issue of fuel to officers causes great hardship to those who are stationed at military posts in inclement climates and on the prairies, where fuel is scarce and costly. It is much to be desired that this allowance be restored. It is considered by officers of the Army even more unjust to those in the wilderness than the abolition of the forage-ration was to those living east of the Mississippi. That complaint has been put an end to by the law of February 24, 1881, but the question of fuel has failed to meet Congressional remedy.

SUBSISTENCE DEPARTMENT.

Attention is invited to the clause in the appropriation acts requiring ten per centum to be charged officers and enlisted men in excess of original cost price to the United States on all subsistence stores sold them, and, as this addition is considered by officers and enlisted men to be onerous and unjust to them, legislation is recommended by the Commissary-General by which sales will hereafter be made to officers and enlisted men at cost prices, as was formerly the case.

The existing system of furnishing tobacco to enlisted men, by causing the small money values of the quantities drawn by each man to be charged on the pay-rolls and collected by the paymasters, to be subsequently transferred to the credit of the appropriations of the Subsistence Department upon the books of the Treasury on settlements made in the offices of the accounting officers, entails a very considerable expense to the government for clerical services in the Pay and Subsistence Departments which might, to a great extent, be saved by so modifying existing laws as to cause tobacco to be placed on sale in the Subsistence Department in the same manner as other articles are held for sale to officers and enlisted men under section 1144, Revised Statutes. This can be easily effected by repealing sections 1149 and 1301, Revised Statutes, and inserting the words "including tobacco" in section 1144.

The issues of subsistence for the Subsistence Department of the Army to Indians during the fiscal year 1881 are tabulated by the Commissary-General of Subsistence. It is a matter of annual recurrence that if, from any cause, an appropriation of the Indian Bureau for the support and care of an Indian tribe becomes at any time exhausted, requests are immediately made upon the War Department to furnish subsistence with which to feed the band or tribe unprovided for until an appropriation can be obtained from Congress; and, although section

3678, Revised Statutes, prescribes that "all sums appropriated for the various branches of expenditure in the public service shall be applied solely to the objects for which they are respectively made, *and for no others*," the overruling dictates of reason and sound policy toward these savages, who are capable of inflicting such untold misery upon individuals and expense upon the government, force executive officers to the adoption of expedients which are of doubtful legality. Such an instance occurred in May and June last in respect to certain Indians in the Indian Territory, who, for want of necessary funds on the part of the Indian Bureau, had to be subsisted from the appropriation for the subsistence of the Army until the appropriation for the fiscal year 1882 became available. This was done upon the express promise of the Interior Department to "present the subject to Congress upon the earliest opportunity, and urge upon that body the necessity for an appropriation to reimburse the War Department for such expenditures as shall be incurred in providing for these Indians." It would appear that the War Department should not be left, by inadequate provision for the Indian Bureau, to be made subject to contribution for the maintenance of the Indians whenever the appropriations for the Indian Bureau become, for any reason, exhausted.

The introduction of enlisted cooks into the Army, to prepare the rations of the companies, troops, and batteries, under such regulations as may be prescribed under section 1174, Revised Statutes, is recommended.

The question of the sufficiency or insufficiency of the Army ration for satisfying the requirements of the soldier for food is ably discussed, by officers who have given great attention to the subject, in reports appended to the annual report of the Commissary-General. The outcome of the whole discussion would seem to indicate the sufficiency of the present ration as a whole, if issued to and consumed by the men, or if the product of such of it as may be sold is applied exclusively to the purchase of food for the men.

MEDICAL DEPARTMENT.

The number of deaths of soldiers was 130 from disease, and 67 from wounds and injuries, being 9 per 1,000 of mean strength, the fatal results in cases treated being as 1 to 190.

The number of new official demands upon the Record and Pension Division during the fiscal year, for information as to the cause of death in the case of deceased soldiers and the hospital record of invalids, was 55,040. The average number of such demands, during the previous ten years, had been 22,245 annually, and the number during the fiscal year terminating June 30, 1880, was 39,241; the number received during the fiscal year ending June 30, 1881, being an increase of 40 per cent. over the previous fiscal year, and of 147 per cent. over the annual average of the previous ten years.

At the commencement of the fiscal year 6,964 cases remained unanswered, making 62,004 cases to be disposed of during the year.

Search was made and replies furnished to the proper authorities in 40,596 of these cases, leaving 21,408 unanswered cases on hand on the 1st of July, 1881.

This work becomes more difficult as the period elapsed since the close of the war increases, for the reason that claimants are in many cases unable to furnish accurate or definite data as to time and place of treatment; also, the volumes of hospital records on file in this office are becoming so very dilapidated, from constant handling, that the utmost care must be exercised in order that the entries contained therein may not be irretrievably lost, the clerical force not having been sufficient during the past fiscal year, or at any previous time, to permit of the copying of these original records.

The clerical force of the office was increased by forty clerks last March, under the provisions of the act of Congress approved March 3, 1881, but as, on account of the peculiar nature of the work, newly appointed clerks experience considerable difficulty in learning it, some time must necessarily elapse before they can be expected to perform it with the facility and accuracy exhibited by those who, from long experience, are more familiar with the records.

The Surgeon-General again invites attention to the necessity for a new fire-proof building for the Army Medical Museum and Library, and refers to the following extract from the message of the President to Congress at the commencement of its last session, and requests that the subject be again brought to the attention of that body:

The collections of books, specimens, and records constituting the Army Medical Museum and Library are of national importance. The Library now contains about 51,500 volumes and 57,000 pamphlets relating to medicine, surgery, and allied topics. The contents of the Army Medical Museum consists of 22,000 specimens, and are unique in the completeness with which both military surgery and the diseases of armies are illustrated. Their destruction would be an irreparable loss, not only to the United States, but to the world. There are filed in the Record and Pension Division over 16,000 bound volumes of hospital records, together with a great quantity of papers, embracing the original records of the hospitals of our armies during the civil war. Aside from their historical value, these records are daily searched for evidence needed in the settlement of large numbers of pension and other claims, for the protection of the government against attempted frauds, as well as for the benefit of honest claimants. These valuable collections are now in a building which is peculiarly exposed to the danger of destruction by fire. It is therefore earnestly recommended that an appropriation be made for a new fire-proof building, adequate for the present needs and reasonable future expansion of these valuable collections. Such a building should be absolutely fire-proof; no expenditure for mere architectural display is required. It is believed that a suitable structure can be erected at a cost not to exceed \$250,000.

PAY DEPARTMENT.

The Paymaster-General reports the receipt by the Pay Department, during the last fiscal year, of \$15,630,967.80; all of which is accounted for without loss.

He calls attention to the hardship upon officers at remote stations caused by the deduction of one-half their pay during that part of leave which is in excess of thirty days in any one year, remarking that most of them desire to come to the Eastern States, and that the great loss of time and the expenses of travel place them at a disadvantage and recommends a repeal of the laws on the subject, the first of which was passed in 1863.

He asks for two additional clerks, and recommends that paymasters clerks shall be classed and paid as other clerks.

He again urges the necessity of consolidating the appropriations for pay of the Army, mileage, and general expenses under one title.

The amounts to be disbursed under the above titles are, with two or three exceptions, limited by statute law. If the appropriation is in excess of these demands, the excess cannot be disbursed, but will be carried by operation of law to the surplus fund; but if the appropriation is not sufficient to meet the demands, the excess becomes a valid claim against the United States, and the subject of a deficiency estimate, thus forcing a very worthy class of claimants to a delay that is oftentimes very embarrassing. Many of the items are estimated upon expenditures of prior years, the best data obtainable. This estimate may be in some cases excessive and in others not sufficient, but in the aggregate the amount appropriated will be sufficient to meet all demands if the excess in one of them can be used to supply the deficiency in another. Again, the division of the appropriations into three heads, for each year, makes it necessary to keep in the hands of each disbursing officer a balance of funds much larger than if there were but one appropriation for each year, as he is obliged to carry a working balance under each appropriation. This, in case of a limited appropriation, makes it very difficult to properly distribute the funds over so scattered a field as that occupied by paymasters.

ENGINEER BUREAU.

I invite especial attention to that part of the report of the Chief of Engineers which refers to our sea-coast defenses. For many years, during which no work whatever has been done upon these defenses except for their preservation and repair, under small appropriations confined to these purposes by law, the Chief of Engineers has called attention in his annual reports to the very great danger which results from leaving our fortifications in their present condition.

The casemated works, which necessarily form a large part of our sea-coast defenses, were built before the invention of modern armor, and before the introduction of rifled guns into maritime warfare. They are built of masonry, unprotected by armor, and although in their day they were equal to any in the world, they are utterly unfitted to withstand the assaults of modern ships of war.

The Chief of Engineers shows that a defense by fortifications and

torpedoes is the only one which is at all practicable for coasts as extended as ours, comprising so many rich maritime cities, extensive navy-yards, and depots of supply; that any attempt at any other mode of defense would be enormously expensive both for first cost and cost of maintenance, and that it is the only mode adopted by maritime nations.

Experience shows that modern wars come on suddenly; that serious international disputes occur between nations the relations of which are apparently the most unlikely to be other than friendly, and that a condition of readiness for defense and an attitude of belligerency are sometimes the best preventives of actual war. We know that the necessary new works and the proper modifications of our old works will require many years for their completion, and it seems simply a matter of common prudence that we commence without delay, and under liberal appropriations, to put our coasts in an efficient condition of defense.

I also commend attention to that part of the report of the Chief of Engineers which speaks of the needs of our torpedo system, and the importance of increasing the strength of the Engineer Battalion to 520 men, the minimum number consistent with reasonable efficiency. The work of engineer troops is more technical than is required in any other part of the Army, and while this is so, they are regular soldiers, thoroughly instructed in infantry tactics, and are as available in an emergency as any other troops of the line for any duty that may be required of soldiers. On our torpedo service much will depend in future wars, and 520 men in training for that service, for all our coasts and all our harbors, seems but a small number, and the desire of the Chief of Engineers for an increase of 320 men above the 200 to which the battalion is limited by orders, under the reduction of the Army to 25,000 men, is a reasonable one, and should be granted. No increase of officers is necessary, simply a provision of law authorizing the recruitment of the Engineer Battalion by the number necessary to raise its strength to 520 enlisted men, this number to be in addition to the 25,000 men who now constitute the entire Army, if my recommendation for a repeal of recent restrictions as to the enlisted force of the Army is not concurred in. The maximum strength of the battalion, as authorized by existing law, is 752, or 232 more than the strength recommended.

The funds applied to the improvement of rivers and harbors during the past fiscal year were derived from the appropriation of June 14, 1880, and balances remaining unexpended of previous appropriations, the total amount available for expenditure on July 1, 1880, being \$13,549,455.41. To the above should be added certain small amounts from the appropriation of March 3, 1881, which were made available before the commencement of the present fiscal year. Operations have been carried on under approved projects for the improvements to which they relate, with results which have been generally satisfactory.

Detailed information in regard to the various works in progress during the year will be found in the report of the Chief of Engineers.

The preliminary arrangements which were in progress at the date of last annual report for making a practical test of the flume invented by Mr. M. J. Adams for increasing the depth of water in the Mississippi River, for which the sum of \$20,000 was provided by act of March 3, 1879, have been continued during the fiscal year, under the direction and supervision of the inventor.

The surveys and examinations of rivers and harbors, called for by the act of March 3, 1881, are in process of execution, and it is expected that the reports and maps will be ready for transmission to Congress in the early part of the session.

The Mississippi River Commission has been engaged in the further prosecution of surveys of the river and its tributaries, and in considering plans for the improvement of the main river, and in making the necessary arrangements for the application of the appropriation of \$1,000,000 in the river and harbor act of March 3, 1881, for the improvement of the river below Cairo. Reports from the commission will be found appended to the report of the Chief of Engineers.

On the survey of the northerly and northwestern lakes, a new chart of the west end of Lake Erie has been completed and published. The final report of this survey is now in course of preparation.

In the survey of the territory of the United States west of the one hundredth meridian work has been confined to the reduction of notes and the construction of maps. Six atlas sheets have been completed.

Volume VII, the last of the quarto reports of the fortieth parallel survey, has been published.

Eight officers of the Corps of Engineers have been on duty at the headquarters of the military divisions and departments, and have been engaged in making such surveys and preparing such maps as are required for the use of the Army. The maps prepared by these officers are of great value in the movement of troops, and the establishment of posts for controlling the Indians and protecting settlers. There is a great demand for the maps from citizens for use in the location of railroads, mines, and valuable lands. The small appropriation asked for the next fiscal year for continuing these surveys and for publication of maps required for military purposes is earnestly recommended.

ORDNANCE DEPARTMENT.

The report of the Chief of Ordnance shows that on July 1 we had in store only 37,526 small-arms. This is but little more than the annual consumption, and I concur in his opinion that increased appropriations for accumulating a large reserve are of great necessity.

The Chief of Ordnance recommends that the standing annual appropriation of \$200,000, made in 1808, for arming the militia, should be largely increased. My opinion, derived from an examination of the

debts and credits of the States, as they now stand under that law, is that it would be at least advisable to give legislative authority to the Secretary of War to give, after a specified time in each year, the allotments of States not called for to such States as make requisition therefor to arm their militia. Under the practical working of the present system, advances of arms strictly unlawful are made to those States which have a large force of organized militia, and a credit is left standing on the record to States which take no such steps for the public protection.

The "act making appropriations for fortifications and other works of defense, and for the armament thereof for the fiscal year ending June 30, 1882, and for other purposes," approved March 3, 1881, provides:

And the President is authorized to select a board, to consist of one engineer officer, two ordnance officers, and two officers of artillery, whose duty it shall be to make examinations of all inventions of heavy ordnance and improvements of heavy ordnance and projectiles that may be presented to them, including guns now being constructed or converted under direction of the Ordnance Bureau; and said board shall make detailed report to the Secretary of War, for transmission to Congress, of such examination, with recommendation as to what inventions are worthy of actual test, and the estimated cost of such test; and the sum of twenty-five thousand dollars, or so much thereof as may be necessary, is hereby appropriated for such purpose.

In conformity with the foregoing act, a board of officers has been appointed and is now in session for the purpose of making examinations of all inventions referred to in the law, and making a detailed report of such examinations, with recommendation as to what inventions are worthy of actual test, and the estimated cost of such test. Its report will undoubtedly be made and transmitted to Congress early the next session.

A special report from the Chief of Ordnance shows that under the act of March 3, 1881, there was sold, prior to July 1, 1881, 29,500 pounds of unserviceable and unsuitable powder, at 8 cents per pound, and that on June 24, 1881, a contract was made for the procurement of 500,000 pounds of hexagonal powder, at 25.4 cents per pound.

Congress at its last session provided for convening a board of officers to examine magazine guns, with a view to the selection of some of the best for trial in service. The board is now in session.

REPORT OF THE CHIEF SIGNAL OFFICER.

Eight officers are, under present regulations, annually detailed for instruction in military signaling at Fort Myer, and, during the past year, an average number of seventy-nine enlisted men have been present subject to instruction in signaling and in the duties of observers at weather stations.

Six hundred and ten miles of sea-coast telegraph lines are operated by the Chief Signal Officer for the use of the Weather Bureau.

Five thousand and seventy-seven miles of frontier telegraph lines are also operated by him, and are of indispensable value to the military service.

A very brief summary of the work of the Chief Signal Officer includes the preparation of new instructions for observers; the preparation of new and improved forms for the recording and preservation of meteorological data; the preparation of special bulletins for the press, containing weather information of public interest; the forecasts of weather, of hot or cold waves for periods exceeding twenty-four hours; the forecasts of "northers" for the interior plateau; the adoption of a new storm signal (the Cautionary Northwest) for the interior lakes; the arrangement for increase of river service, and wider publication of warnings of floods or ice gorges; the changes and improvements in the publication of the International Bulletin, and the Monthly Weather Review, with their accompanying charts; the increased information added to the Farmers' and to the Railway Bulletins; the organization of a service for the special benefit of the cotton interests of the South; the extension of the special frost warning to the fruit interests of the country; the investigations into thermometric standards, and into barometric standards; the preparation of new hygrometric tables containing correction for altitude; the revised determinations of the altitudes of Signal Service stations; the computation of monthly constants for the reduction of observed barometric pressures to sea-level; the arrangements for original investigation in atmospheric electricity, in anemometry and in actinometry, and, in the last subject, especially with reference to the importance of solar radiation in agriculture and the absorption of the sun's heat by the atmosphere; the co-operation in an expedition to the summit of Mount Whitney, California, for the determination of problems in solar physics; in meteorology, the preparation of conversion tables for the English and metric systems; the co-operation in the dropping of time balls at Signal Service stations; the publication in quarto form of special professional papers; the offering of prizes for essays of great merit on meteorological subjects; the organization of State weather services; the new investigation of danger lines on western rivers; the organization and equipment of two expeditions for meteorological observation and research in the Arctic regions of America, one to be stationed at Lady Franklin Bay, the other at Point Barrow, Alaska, both co-operating in this work with a system of stations established in the Polar region by international conference; the establishment of a system of stations of observation in Alaska; the arrangements for organizing a Pacific Coast Weather Service; the display at the Paris Electrical Exposition; the experiments for improving newspaper weather charts; the increase since June 1 of telegraphic weather service, exceeding in value \$34,000 per annum, without additional expenses to the United States, and the extension and construction of military telegraph lines.

Full details of these operations will be found in the report.

The total number of stations of observation was, on June 30, two hundred and ninety-six, in the management of which the enlisted force of five hundred men (excepting those under instruction) is constantly employed.

The plan of exhibiting as widely as possible in the agricultural districts throughout the United States, the results of the daily office studies, in the form of printed forecasts, for the benefit of the agricultural populations, frequently described in former reports, has been continued in operation.

The railway bulletin service has been increased during the year, and continues to give satisfaction as a rapid means of disseminating the indications issued from the office. Ninety-three companies, with a total of two thousand nine hundred and thirty-seven stations, are now co-operating in this service.

Storm signals are displayed, when necessary, at 116 ports.

During the past year stations of observation on the habits and ravages of the Rocky Mountain locusts or grasshoppers were established by the Chief Signal Officer in those sections which the experience of past years has shown to be most exposed to the ravages of these pests. It is gratifying to state that not a single report of the ravages of locusts was received.

Attention is earnestly invited to the remarks of the Chief Signal Officer upon the subject of a permanent organization, to obviate the necessity of calling for details of officers from regiments. The work done by him undoubtedly requires the assistance of a number of officers in addition to the scientific staff of civilians. Officers of the Engineer and Ordnance Corps cannot properly be detailed on such duty, not only for the reason that their actual services in their own departments are constantly required, but because it would be an act of injustice to take them away from duties and studies of a very technical character, proficiency in which is a condition precedent to promotion. The taking of officers from the line of the Army is now the only course left, but this is objectionable, as the officer is nearly always detailed in opposition to the wishes of his commanding officers; the detail removes him from his proper military duties, imposes an undue share of company and regimental duty upon his brother officers remaining with the troops, and, at last, if the officer's services are valuable, results in conflicting claims for his return and his retention, always annoying, and sometimes difficult to decide.

It will be seen from the elaborate and interesting report of the Chief Signal Officer that the work of the Weather Bureau is highly scientific and wholly unmilitary, and that it depends for its value upon constant observations made at many stations, and continuous records of those observations. Any interruption, however short, at any station, makes a gap in the complete records, upon whose perfection rests the accuracy of calculated results. This work occupies all the time of the force under the Chief Signal Officer, detailed officers, civilian employés, and enlisted men, and would require an equal force under a permanent organization; and the detachment of any of them for signal duty in the field in time of war would cause a great and lasting injury, if no

destruction, to the Weather Bureau Service. As it is not supposed that Congress intends to make its success or its existence contingent upon the happening of a war, and as the Army is maintained with the purpose of being prepared for war, it is earnestly recommended by me that in any permanent organization there shall be a clear and permanent separation of the force of officers and men engaged under the Chief Signal Officer in the work of the Weather Bureau from the force of officers and men who are to be available in time of war for service in the field in the performance of signal duties.

THE MILITARY ACADEMY.

The annual report of the superintendent shows a satisfactory state of discipline.

The report of the Board of Visitors to the Military Academy is herewith submitted, and attention is invited to its recommendations.

It is gratifying that the board is of opinion that there has never been at the Academy a more competent academic board than at present.

The board renews the recommendation for an appropriation for the construction of a bath-house, swimming-tank, and the necessary heating apparatus, in which I concur. The only available place for bathing and swimming is very dangerous, and the want of a proper provision has cost several lives. The necessary expenditure would not be large, and would be of great benefit.

Attention is especially invited to the views of the Board of Visitors on the subject of the standard of acquirements necessary for admission to the Academy, which is properly to be considered in connection with the length of the course after admission. I concur in the views of my predecessor that it would not be well to raise the standard of admission. The result of the last examination, in which 49 out of 118 candidates were rejected, shows that the standard is already so high as to prevent the admission of many who would, undoubtedly, if they had been so situated as to receive proper preliminary training, prove valuable officers. It has recently been recommended to me by the academic board to permit the discontinuance of certain prescribed studies in the course, for the purpose of giving time for others the importance of which was apparent. A consideration of the subject suggested by this recommendation leads me to the belief that it would be best to extend the course so as to cover five years. It is believed that by so doing, not only would the benefits of the Academy be more widely extended, but that the graduates would be prepared to render better service to the country.

The existing laws provide for 312 cadets, and that from and after July 1 next all graduates for whom there do not exist vacancies in the Army on the 1st day of July in each year shall be discharged. No provision is made for a reduction in the number of those to be instructed, and it is probably the sense of Congress that the expense of

educating the number authorized by law, even if some of them never enter the Regular Army, is well repaid by their availability in time of need as officers of Volunteers, or of an increased regular force.

If the full number authorized by law is educated at the Academy, no additional annual expense is incurred by keeping the cadets through a five years' course, and it is not unlikely that the decrease in the average number of annual graduates (one-fifth of the whole number being graduated each year, instead of one-fourth) would be so much affected by a decrease in the percentage of rejections and of dismissals for deficiency, that the graduates from the Academy would more nearly equal the annual casualties in the Army than is now the case. During the decade ending June, 1880, of nearly 750 appointments to the grade of second lieutenant in the Army, only about two-thirds were graduates of the Military Academy, so that under the present system less than two-thirds of the number of cadets possible, and provided for under the law, are graduated. From such consideration as I have been able to give the subject, I believe that this large deficiency is mainly owing to the compression of an undue amount of work into a term of four years, causing not only many failures by the way, but necessitating an exceedingly rigid preliminary examination. In a course of five years, not only would more time be given for the necessary studies, but a part of the first year could be considered as a period of probation, avoiding the necessity of a very severe preliminary examination, and better enabling the academic board to form a just idea of the general fitness of the young cadet to grapple with the higher studies.

EDUCATION IN THE ARMY.

Chaplain Mullins, the officer now in charge of this work, reports that at the various schools at military posts now in operation there is an average attendance of 912 enlisted men and 1,390 children of officers, enlisted men, and civilians. He calls attention to the difficulty of finding competent teachers among the enlisted men, and the interruptions caused by their military duties, none of which are omitted. I approve his recommendation for statutory authority for the enlistment of 150 competent men to be rated as schoolmasters, with the rank and pay of commissary-sergeant.

The reading-rooms established at most of the posts are very popular with enlisted men as well as officers. The average daily attendance upon them is about 4,800.

THE SOLDIERS' HOME.

The report of the Board of Commissioners of the Soldiers' Home shows that 550 members were receiving the benefits of the Home on September 30, 1880. During the year 318 permanent and temporary members were admitted; 46 members died; 197 were dropped, voluntarily and otherwise; leaving 588 members on September 30, 1881.

The board call attention to the evil effect of the unrestrained use of money by some members who are also in receipt of pensions.

GOVERNMENT HOSPITAL FOR THE INSANE.

The following is the number of persons admitted into the above-named institution, under orders of the Secretary of War, from October 1, 1880, to October 1, 1881:

Regular Army—

Commissioned officers	3
Commissioned officers (retired)	1
Enlisted men:	35
Enlisted men (late of the Army)	4

Late volunteer service—

Commissioned officers	1
Enlisted men	2

Hospital matrons attached to the Army	1
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Inmates of the United States Soldiers' Home	5
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Military prisoners	3
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Employés of the Quartermaster's Department, U. S. Army	1
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Employés of the Subsistence Department, U. S. Army	1
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Total	57
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RECORDS OF THE WAR OF THE REBELLION.

The publication of these records is proceeding as rapidly as is consistent with accurate preparation. Two volumes have been published, and ten volumes have been made ready for the printer, seven being in his hands in various stages of preparation. Many contributions by gift or loan have been added during the year to the files of Confederate documents.

BUILDING FOR STATE, WAR, AND NAVY DEPARTMENTS.

The construction of this building, for the accommodation of the State, War, and Navy Departments, was confined, during the year, to the north wing, exclusively, and the walls of this wing were completed to the roof, of which the greater part of the iron-work is in place.

This wing forms one of the portions of the building to be used by the War Department, at present crowded, with some of its records, into a part of the wing allotted to the Navy Department. An appropriation of \$100,000 for the completion of the north wing is recommended.

I also ask the favorable consideration of Congress upon the application for \$450,000, included in the annual estimates of this department, to begin the erection of the west wing and the center wing of the building. The present isolation of some of the most important bureaus is not only inconvenient, but many of the outside buildings in use do

not afford adequate security to the public records. It is of the greatest importance that these records should be placed beyond the danger of destruction by fire at the earliest possible moment, and their safety cannot be assured until the new building is completed.

IMPROVEMENT OF THE SOUTH PASS OF THE MISSISSIPPI RIVER.

The last annual report from this department brought the history of this work to August 9, 1880, when there had been from July 8, 1879, a full year's maintenance of the channel required by law, after excluding days of non maintenance, all of which occurred in the first two quarters. Uninterrupted maintenance was continued for the two quarters ending February 9, 1881. The engineer's certificate for the succeeding quarter showed that there was full maintenance, excepting through the pass itself, in which, as measured from the plane of the established gauge mark, there was a slight failure for a distance of 240 feet; but during the time in question the stage of the river was such as to make its actual level, at low tide, 1.2 feet higher than the established low water mark, so that the required channel was in fact maintained during the quarter. The facts being submitted by me to the Attorney General for his opinion as to whether Mr. Eads was entitled to payment for maintenance during the quarter ending May 9, 1881, he answered in the affirmative, and payment was made accordingly. The next quarter extended to include August 13, 1881, four days being excluded in computation on account of the channel being at that time reduced to 110 feet in width at one point and given the required width by dredging. Four quarterly payments of \$25,000 each for maintenance, and two semiannual payments of \$25,000 each for interest on the \$1,000,000 retained, have accordingly been made to Mr. Eads.

The total expenditures of the government up to this time, on account of this improvement, are \$4,550,000. It will be seen that there has been a substantial maintenance of the prescribed channel during the eighteen months last past, with a loss of only four days, and that the remarks in my predecessor's report concerning the permanency of this work are confirmed, to a large extent, by the results obtained during the second year of successful operation of this remarkable improvement.

THE FREE BRIDGE AT GEORGETOWN.

The difficulties met in attempting to carry out the provisions of the act of February 23, 1881, providing for a free bridge on the Potomac River, at or near Georgetown, have prevented much progress. The act forbids the incurring of any expense whatever for an entirely new bridge until a contract for its erection, at a cost not exceeding the prescribed limit of \$140,000, shall have been made. There are, therefore, no funds to pay for preliminary surveys or for specifications on which

to base a proper call for bids, and legally no funds out of which to pay for the advertisements for proposals.

I have no doubt that the wisest course is to use the piers of the present Aqueduct Bridge, for which an alternate provision is made in the act. It is, however, owned by one corporation and leased to another for a long term of years. The lessee offers to sell for the price named in the act, but the lessor refuses to sell. The United States acquired some interest in the old bridge, whose effect and extent must be determined judicially, if ever settled, by an advance of \$300,000 to the corporation of Alexandria in 1837, which sum was expended in completing the canal and bridge. Bids for the construction of an entirely new bridge have been called for, but the result is not yet reported to me. If no bid is accepted, it is my opinion that such additional legislation should be had as to authorize a judicial condemnation of the present Aqueduct Bridge, the claims to the amount of compensation awarded to be settled as may be provided, and the old piers to be used for the construction of the free bridge. In this way the equitable rights of the government and of all parties in interest can be protected, and the actually needless construction of new piers for a free bridge be avoided. The subject, however, requires a more extended consideration than can be given at this time, and the attention of Congress will probably be invited to it in a special communication.

COWPENS MONUMENT.

By the joint resolution of Congress approved May 26, 1880, the duty devolved upon the Secretary of War to cause to be made a bronze statue of General Daniel Morgan, the commander of the American forces at the battle of Cowpens, South Carolina, and to cause the same to be delivered, through the governor of that State, to the Cowpens Centennial Committee, in time to be placed in position upon the memorial column before the 17th day of January, 1881, the centennial anniversary of the battle. With the approval of the President, my predecessor selected Mr. J. Q. A. Ward, of New York City, as the artist to execute the statue, and a contract was entered into with him for the sum named in the law, \$20,000.

October 26, 1880, Mr. William A. Courtenay, the chairman of the Centennial Committee, advised Mr. Ward of the inability of the committee to complete the arrangements for unveiling the statue on January 17, 1881. To give the artist ample time to review his work carefully, the time for completion and delivery of the statue was extended until March 8, 1881. The statue was finished in bronze February 17, 1881, and, after inspection and acceptance, was shipped to Spartanburg, South Carolina. The chairman of the Cowpens Centennial Committee and the governor of South Carolina have certified that the statue was received in perfect order, and that the terms of the contract were fully complied with.

MONUMENT AT YORKTOWN.

The final report of the commission of artists selected by my predecessor to recommend a suitable design for the monument directed by the act approved June 7, 1880, to be erected at Yorktown, was received by me March 14, 1881, and at once submitted to the select committee of senators and members of the House of Representatives. The model was not received from the artists until May 26, and information of its arrival was on the same day given the committee.

The select committee, on June 30, 1881, notified me of their approval and adoption of the design submitted, and immediate directions were given to proceed with its construction, so far as could be done within the short time remaining before the 19th day of October, 1881, the time fixed for the national celebration at Yorktown. The site was selected by the joint committee of Congress July 7, 1881. It was not possible to proceed further by October 19, 1881, than the laying of the corner stone, and this had to be done without awaiting the approval of the title to the site selected. The corner-stone having been laid, as a part of the celebration, further work of construction has been suspended, awaiting the approval of the title to the land occupied and its cession by the State of Virginia.

ROBERT T. LINCOLN,
Secretary of War.



REPORT OF THE GENERAL OF THE ARMY.



REPORT

OF

THE GENERAL OF THE ARMY.

HEADQUARTERS OF THE ARMY,
Washington, November 3, 1881.

SIR: I now have the honor to submit to you the following annual reports:

1st. Of Adjutant-General Drum, including tables which exhibit in great detail the organization of the Army according to existing laws; of the actual strength of organizations and distribution of troops; and statements of enlistments, casualties, recruitment, number of trials, &c., with comments and recommendations of which I will treat in due order.

2d. Of Inspector General Sacket, giving results of the actual inspections of the various posts; of money accounts, property returns, and everything which contributes to the efficiency of the military establishment, with certain recommendations which I shall likewise consider in the proper place.

The above are the only two heads of the staff bureaus who report to me, all others are construed as branches of the War Department, and report direct to the Secretary of War.

I also transmit herewith the very full and exhaustive reports of all the commanding generals of divisions and departments, which record the changes made since their last annual reports, with a narrative of events which are most useful to the parties in interest and to the future historian. These are as follows:

- 1.—Military Division of the Missouri, Lieutenant General Sheridan.
- 1 A.—Department of Dakota, Brigadier General Terry.
- 1 B.—Department of the Platte, Brigadier-General Crook.
- 1 C.—Department of the Missouri, Brigadier-General Pope.
- 1 D.—Report of Colonel Hatch.
- 2 D.—Department of Texas, Brigadier General Augur.
- 3.—Military Division of the Atlantic, Major General Hancock.
- 3 A.—Department of the East, Major General Hancock.
- 3 B.—Department of the South, Colonel and Brevet Brigadier General Hunt.
- 5.—Military Division of the Pacific and Department of California, Major General McDowell, followed by 5 a, b, and c.
- 5 A.—Department of the Columbia: 1, Colonel and Brevet Brigadier-General Wheaton; and 2, Brigadier General Miles.
- 5 B.—Department of Arizona, Colonel and Brevet Brigadier-General Wood.

I also submit herewith (6) the reports of Brig. Gen. O. O. Howard,

Department of West Point, and (7) of Colonel and Brevet Major General Getty, commanding Artillery School at Fort Monroe, Virginia.

All these are so full and interesting that I am sure they will receive your careful perusal. For a short time, viz, from January 31, 1881, to May 9, 1881, a Military Division "of the Gulf" was constituted by President Hayes, embracing Louisiana, Texas, Arkansas, and the Indian Territory, with Major General Schofield in command; but as this division was found to fulfill no useful military end, it was discontinued by President Garfield, leaving boundaries as they existed before. These boundaries generally conform to political lines, and are the result of long experience, clearly limiting and defining the authority and consequent responsibility of each commanding general.

Whilst the troops have been kept very busy during the past year no serious Indian or other war has occurred, but great progress has been made in collecting and locating Indians, hitherto hostile, on the proper reservations. Sitting Bull and his adherents, who had fled into British territory, are now held at Fort Randall, Dak., as prisoners of war, and the Utes have been moved to a new reservation in Utah, fully described in the reports of Generals Terry and Sheridan. The sudden outbreak of a part of the Apaches in Arizona is explained in the reports of Generals Willecox and McDowell. In the latter case it was found necessary to re-enforce for a short time the usual garrisons of Arizona by a strong detachment from New Mexico, under Colonel Mackenzie, of the Fourth Cavalry. The guilty Apaches are now held as prisoners for trial. Some have escaped into Mexico, whilst the greater part of the tribe remains on their reservation at San Carlos, under the proper civil agent. I will append to General McDowell's report copies of all papers necessary to illustrate this event.

All these annual reports, with justice, dwell on the fact that our companies are too small for efficient discipline and for economical service. There are in the Army 430 companies, which are necessarily widely scattered over our vast domain, to guard property and to prevent, as far as foresight can, complications and troubles of every variety of kind—at one time protecting the settlers against Indians, and again Indians against the settlers. When these occur it is always sudden and re-enforcements have to be hurried forward from great distances and always at heavy cost for transportation of men, horses, wagon and supplies. This cost in the aggregate will, in my judgment, be more than sufficient to supply an increase of 20 per cent. of *private soldiers*—all that I would ask for at this time, because I believe this increase will add little, if any, to the annual cost of the Army, and yet give great relief to our overtaxed soldiers. In the last ten years our frontiers have so extended, under the protection of our small Army, as to add at least a thousand millions of dollars to the taxable wealth of the nation; has enabled emigrants to settle up remote parts of the country, and is the principal cause of the great prosperity which is felt throughout all parts of the country. When the national Treasury was poor and loaded with debt, the Army endeavored, gracefully, to submit to overwork, but the now appeal for relief, and I do most earnestly ask the honorable Secretary of War to apply to Congress to repeal that clause of existing law which limits the enlisted force of the Army to 25,000 men, and to enact that each and every company in the Army may be enlisted to at least 50 privates, making 62 enlisted men and 3 officers to each of the 430 companies, thus increasing the Army proper to 26,660 enlisted men, whose number in practice will probably never exceed 25,000. This should form the combatant force; and, as experience and universal practice

have demonstrated the necessity for another or non-combatant force, I further urge that special provision be made by law for each of the following separate and distinct purposes, viz:

Regimental Battalion	200
Recruit recruiting companies and parties	1,250
Detachment detailed on general service (clerks)	420
Quartermaster Department (laborers and mechanics)	400
Mounted detachments (Military Academy)	192
Post guard at Fort Leavenworth (special)	90
Detachment of stewards	175
Company sergeants	112
Company sergeants	150
Infantry scouts	300
Signal detachment	500
Total	3,789

Which number, added to the 26,660 before explained, will make a total created force of every nature and kind of 30,449.

By section 1115, Revised Statutes, the number of enlisted men of all arms of service is limited to 30,000; but for some years, in appropriation bills, the number has been further restricted to 25,000, which, in my judgment, has resulted in no real economy, and has imposed on the private soldiers of the Army too much manual labor and an undue proportion of risk to life and health.

In this connection I submit a statement of the actual strength of enlisted men in the Regular Army, compiled from returns received at the Adjutant General's Office up to October 15, 1881, as follows:

First Cavalry	700
Second Cavalry	774
Third Cavalry	621
Fourth Cavalry	621
Fifth Cavalry	557
Sixth Cavalry	732
Seventh Cavalry	658
Eighth Cavalry	707
Ninth Cavalry	744
Tenth Cavalry	702
Total Cavalry	6,322
First Artillery	494
Second Artillery	499
Third Artillery	499
Fourth Artillery	472
Fifth Artillery	439
Total Artillery	2,403
First Infantry	308
Second Infantry	432
Third Infantry	424
Fourth Infantry	323
Fifth Infantry	410
Sixth Infantry	440
Seventh Infantry	454
Eighth Infantry	418
Ninth Infantry	337
Tenth Infantry	333
Eleventh Infantry	377
Twelfth Infantry	425
Thirteenth Infantry	426
Fourteenth Infantry	448
Fifteenth Infantry	420
Sixteenth Infantry	424
Seventeenth Infantry	451
Eighteenth Infantry	464
Nineteenth Infantry	435

Twentieth Infantry	129
Twenty first Infantry	435
Twenty second Infantry	384
Twenty third Infantry	422
Twenty fourth Infantry	500
Twenty fifth Infantry	521

Total infantry

Combatants	1
Engineer Battalion	196
Permanent and recruiting parties, music boys, and recruits in depots. 1,251	
Enlisted men, detailed on general service.....	421
Ordnance Department	406
West Point detachments	192
Prison guard	89
Hospital stewards	171
Ordnance-sergeants	112
Commissary sergeants	149
Indian scouts	300
Signal detachment	494

Non-combatants

Total enlisted force of the Army of the United States, October, 1881 . . .

There are 120 companies of cavalry, 60 of artillery, and 250 of infantry. By dividing the total force of each arm of service by the number of companies, we have the average strength of company—

For cavalry, 58 enlisted men.

For artillery, 40 enlisted men.

For infantry, 41 enlisted men.

These numbers embrace 12 non-commissioned officers and music, leaving only 46, 28, and 29 privates, respectively—numbers so small that the companies are almost ridiculous, compelling commanding officers to group two and even four companies together to perform the work of one.

I also invite attention to the absurdity of styling in orders the companies of foot artillery, armed with muskets and without guns, "batteries." They are not batteries in any intelligent sense. The same term is applied to "troop" for cavalry. All should be styled what they are in fact—"companies."

Nearly every general officer commanding troops on the frontier in his annual report for a larger increase than I have herein indicated, but this may be better accomplished by giving to the President the right to increase, at his discretion, the companies most exposed to danger to any number of privates, not exceeding 100, limited actually in practice by the actual appropriations of money rather than by a number of men.

In the report of Inspector General Sacket you will find two points worthy of notice. He represents that his corps of officers is now limited to five, which is too small a number for the important duties which devolve on them. The inspector general must necessarily be stationed in Washington, and should have at least one competent assistant to assist him. Then there are now, and probably always will be, three geographical divisions and nine departments, each of which ought to have an inspector general. This would necessitate 14 officers in all—an increase in this corps of nine majors, each of whom should have the right to employ one clerk, with the same compensation which is now allowed to paymasters' clerks. I cordially unite with General Sacket in his latter recommendation, and further, that the President be allowed

select any increase of officers in the Inspector-General's Department from the majors and captains of the line. This is the only increase of commissioned officers asked for in the whole Army, and would, in fact, only be an increase of the same number of lieutenants needed to fill the vacancies occasioned by the promotion of the nine majors.

The second recommendation is in regard to officers' servants. I, myself, have seen occasions when no officer could afford to hire a servant, because a servant's wages exceeded the officer's pay; and as a rule the government compels its officers to live in remote places where no servant will go, of his own free will, for any wages. It is simply impossible for an officer to hire a servant at a hundred places where troops must necessarily be; and on one occasion, two years ago, in Western Montana, I had an escort of a company of cavalry, where, as soon as we reached camp, the captain and lieutenants had to pull off their coats, gather wood and water, cook their own meals, and groom their own horses. I honor labor as much as any man, and never was ashamed to cook my own meal or saddle my own horse: but no officer can habitually do this work and properly supervise his company and command. No soldier should ever be *compelled* to do menial labor without compensation, or without his own consent; but if a soldier is willing to cook and wash for his captain, and to groom his horse, for *pay*, there is no reason why he should be forbidden to do it, and I recommend that the law be repealed, or modified so as to read:

SEC. 1232. No officer shall use an enlisted man as a servant, in any case whatever, without proper compensation, or without his own consent and that of his commanding officer.

With this modification no wrong is possible to any soldier, and the officer will not be compelled, as now, to do menial service or to violate the law.

There is a subject of great importance, needing Congressional action, which has hitherto been discussed and will bear repetition. In the early days of the republic nearly every city and harbor on the Atlantic and Gulf coasts, as well as on the lakes, wanted a fort for protection against public enemies. These were built and still remain the property of the United States, and the Army is charged, in one way or another, with their care and preservation. Very many of them are now absolutely of no use, present or prospective, and should be disposed of. I will not mention names, because of local feeling. Every such city or town, from Maine to Texas and from Duluth to Lake George, has a local pride in its fort and garrison, and if in times past such a fort was built by the United States, any attempt to withdraw the garrison or remove the flag is met by local opposition, often impossible to overcome. I recommend that you apply to Congress for authority to submit the whole question of coast defense to a board of high officers of all arms of service, to consider the whole question, with instructions to report to the Secretary of War what coast forts shall be maintained, what sites shall be retained for future use, and what may be absolutely sold; and further, that authority be granted the President to sell the same, subject to any conditions which Congress may impose.

In like manner, inland, a great number of military posts and stations have either been reserved from the public domain, or have been purchased, which, by the progress of settlement, have become obsolete; yet they need a military guard for protection. These are worse than useless, because they absorb a large fraction of the small Army, which ought to be free for action. For these I would recommend a similar,

but distinct board, to make a thorough study of the whole problem of internal defense, with similar authority to sell and dispose of all posts, except such as are deemed necessary for permanent occupation and future use. If the funds arising from these sales could be appropriated for the permanent sites, I am sure great economy would result to the Treasury, and durable barracks and quarters could be built in place of the temporary shelters which, from wear and tear, have proven the worst possible for economy. This is nothing more than what is occurring all over the United States, where the old log-cabins are giving place to the more lasting brick houses of the farmer and mechanic.

I am further of opinion that section 1136 of the Revised Statutes, forbidding the erection of permanent buildings except by special authority of Congress, should be wholly repealed. The time for temporary shanties has passed away, and no building should henceforth be erected at any of the permanent forts and military establishments except of stone or brick. This would be true economy, whereas wooden buildings with timber foundations and shingle roofs are in the end the most costly. Surely discretion as to the character of such structures can safely be reposed in the Secretary of War.

Beyond question some of the old forts are worth retaining, because they are finished, and are so located as to have little value for sale to private parties. To preserve these the government may, with propriety, economy, and charity, utilize the present corps of retired officers, for whom now there is no employment whatever. There are also in the Army many old soldiers who have served this government in war and peace faithfully for twenty five and more years, in the assurance that they would be provided for in their old age. I recommend that the President be authorized to transfer, out of this class of enlisted men who have thus served for twenty five or more years a number not to exceed 500, including the ordnance sergeants (now 112,) and establish a "Veteran Corps," to be stationed at these old forts, with the rank and pay they held at the close of their active career of Army service, to be subject to the Rules and Articles of War, but only to be used for guarding public property. One or two officers of the retired class and half a dozen of these old soldiers would compose a good garrison for an abandoned post or fort. They could hoist the flag, fire the evening gun, protect and account for the public property, and do what now costs the labor of an organized company. By granting the retired officers thus detailed fuel and quarters, we would provide homes for worthy veterans which would be most honorable and charitable to them and advantageous to the government. At the close of our civil war we had a similar arrangement in what was known as the "Veteran Reserve Corps;" and in Europe all, or nearly all, the governments thus or in some similar way provide for their old and faithful military servants.

The Adjutant General enumerates 190 distinct military posts, 16 arsenals, 3 recruiting depots, and 1 engineer depot. Of these, 84 are on the Lakes, Atlantic or Gulf coasts; 11 on the Pacific; and the remaining 115 are "inland." Besides these are many "military sites," held by purchase long ago, or reserved out of the public domain, which the Attorney General holds cannot be sold or abandoned without specific authority of Congress.

In the annual reports of Generals Sheridan, Hancock, and McDowell I find all subjects of recent interest so fully discussed that I ought not to repeat, but there is one of universal interest which I must discuss, "military education." The whole theory and practice of the Government of the United States has been, and continues to be

that the Regular Army must be small, as small as possible, and that on great occasions we as a people must rely on the volunteer masses of soldiery. No class of men better recognize this fact than the Regular Army, and as the science of war is progressive, we must keep pace with it, so as to impart to the volunteer militia, on the shortest notice, all that is known of the art and practice of war up to the moment of execution. In this sense the whole regular army is a school; but the bulk of the Army of the United States is fully employed otherwise in the daily work imposed on it, so that Congress has wisely provided that the Army shall lend assistance to military instruction in thirty of the civil colleges of the land. Each of these is a separate institution, and the thirty officers thus detailed fall absolutely under the control and authority of the faculty of the college to which each is attached. My own belief is that, inasmuch as the government loans the services of an officer to each of these institutions, they should be subjected to an inspection by an officer of that branch of the military service, whose report to the Secretary of War would enable him to decide whether this provision of law is fulfilled its purpose or not. There is now a great contest among civil colleges for this privilege, and the benefit of superimposing the military drill on the cadets of each college should be inquired into, from time to time, and reports made, so that the largest results possible may come from this investment.

West Point, however, has been, and must continue to be, the fountain-source of military education in time of peace. In the past it has fulfilled its destiny well, but we can no more restore the condition of facts of General Thayer's time than we can turn the dial of time back fifty years. You now have the report of the last Board of Visitors. I here will submit the report of General O. O. Howard, the present Superintendent, and I beg you to consider them both together. Shall West Point go back to 1812 and become an engineer school, or shall it be a military academy for all arms of service? The Board of Visitors substantially recommend that the Superintendent of the Military Academy should be a colonel of engineers. The law is, the superintendent, while serving as such, shall have the local rank of colonel of engineers. Prior to 1866, the selection of superintendent was confined to the Engineer Corps, but not necessarily a colonel. A lieutenant colonel, major, or captain, could have been selected by the President, and when acting as superintendent the law gave him the local rank and pay of colonel of engineers. Great difficulty then existed in making a proper selection from the few officers eligible, which difficulty is now forgotten, and President Grant—himself a graduate, and deeply interested in the success of this National Academy—enlarged the field of selection so as to embrace the Engineer Corps and all the Army. Under his administration, Colonels Pitcher and Ruger, both of the infantry, were appointed superintendent, and finally Major General Schofield. The present superintendent, Brigadier General Howard, was appointed by President Hayes. The Engineer Corps is in no manner excluded from the field of selection; on the contrary, if the President so chooses, he can select an officer of that corps, but is not limited to it exclusively, as is argued by the Board of Visitors.

I will concede to the engineers all the superiority in book knowledge they rightfully claim, but when war comes suddenly, as it most always does, with us, in the beginning the engineers naturally resort to scientific methods; whereas the Infantry, Cavalry, and Artillery, with superior practical knowledge acquired in contact with troops, must go in and do the fighting without further time for preparation. It was so

in 1812, in 1846, and in 1861-'65. West Point is intended to make "soldiers," not professional engineers, and the word "soldier" embraces everything in war. If the engineer be a better soldier than the infantry officer, then let him in war and peace have all the honors and emoluments; but our recent experience does not fulfill the assertion. The honors of the civil war were not confined to the engineers; therefore I trust you will use your influence to leave the selection of the head of the Military Academy, as now, from all arms of service. The comes the question of rank for the superintendent. Shall he be colonel or a general? In my judgment it is a question of pay. In 1830, the pay of a colonel was sufficient; now it is insufficient. A colonel can to day be the Superintendent of the Military Academy without absolute distress. Even the pay of a brigadier is scanty, and that of a major general, without outside help, is barely enough. In 1830 few visitors went to West Point; now hundreds go from all parts of the earth, and the superintendent has forced on him expenses of hospitality that very few are aware of. In my opinion the superintendent should have a salary of \$10,000 to maintain himself and family in that expensive place, and if Congress will decree that sum, we can find captains who are qualified, but it would be a cruelty to *order* any officer to occupy the post on a colonel's pay. Again, a "general" is common to all services; he is neither engineer, ordnance, quartermaster, artillery, cavalry, nor infantry, but he pertains to all—therefore, I think, the superintendent should be a general officer.

Whether West Point should be a department or not is a small concern. I think it should be, because the commander, as such, has the lawful right to order courts-martial and execute their sentences on the spot, not only against cadets, but the soldiers and officers stationed there—a right of great value in maintaining the discipline which forms the model for the whole Army. I am perfectly conscious that the Board of Visitors generally look upon modern times as worse than the then young days. To restore the "good old times" has been the dream of man from the beginning, but time will not stop, and we must accept this truth, and do the best we can *to day*, sure that in due time those who come after us will deplore the sad falling off of modern progress and compare the degeneracy of the year 1900 with "the good old times" of 1880. In my judgment the Military Academy of West Point *to day*, as in 1840, fulfills its uses, and can safely be trusted to prepare boys to become the soldiers of the future.

The Artillery School at Fort Monroe is a specialty peculiar to that arm of the service. In former years we were content with 6, 12, 18, 24, and 32 pounder smooth bore brass or iron guns. Now all this is changed; modern use calls for breech loading steel rifle guns for field service, and monster rifle cannon of 100 tons weight, with a projectile weighing a ton impelled by 350 pounds of powder. To mount and serve these guns require new machinery, and were the most skillful officer of the Mexican war to rise from his grave he would be an infant in the use of modern artillery. The object of this school is to familiarize our young officers with the manipulation and use of these modern monsters, as well as to keep in with the general progress of military science.

The engineer establishment at Willet's Point, New York, is believed to be an admirable school for engineers, and for any officers who may be called on to use torpedoes in connection with harbor defenses, but it does not fall under my supervision or administration, and consequently I merely mention it as one of the schools of instruction in successful operation.

In like manner, the Signal School at Fort Myer provides for the instruction of eight subalterns each year in that branch of knowledge; but, as it takes five years thus to instruct one officer of each of the forty regiments, practical instruction in all the signaling which is essential to the Army is also taught at West Point, at Fort Monroe, and will be at Fort Leavenworth, thus embracing the whole Army.

Henceforth the officers of cavalry and infantry have been doomed to a lasting service in the very remotest parts of what was known as the "West," always in advance of civilization. No sooner than the settlements reached their post, which they had built of sods, or stone, or wood, they had to pull up stakes, move two or three hundred miles ahead, till the same game was repeated, and so on, *ad infinitum*; but now this also is changed. Railroads traverse the continent east and west in the interest of trade and commerce, and these troops are shoved to the right and left to guard the embryo settlements against the Indians, or the Indians against the intrusive settlers, and the time has come when these officers should receive some consideration and some attention. With your approval, on the 7th of May last, I ordered Fort Leavenworth—a post on the Missouri River, occupied since 1819—to be got ready for a school of application for the cavalry and infantry, similar to that at Fort Monroe for the artillery. Under the supervision of General Pope, the necessary arrangements are well advanced, and I feel confident that before the 1st of January, 1882, we will have the plan complete and in successful execution. There will be habitually a garrison of one company of artillery, four companies of infantry, and four of cavalry, to which will be attached, for instruction, one officer of each regiment of infantry and of cavalry for a detail of two years. These will receive instruction in the military art, and then rejoin their proper regiments, to be succeeded by a similar detail every two years, so that in time the whole Army will thus be enabled to keep up with the rapid progress in the science and practice of war. This will complete the system, and I am certain that no matter how sudden war may come on us, we will be prepared for it, and the Regular Army will thus be the better enabled to impart to the vast mass of volunteers all the knowledge of the art of war which is possessed by the most skillful nations of the earth.

In conclusion, I beg to assure you that the enlisted men and officers of the present Army of the United States, in physique, in intelligence, in patriotic devotion to the honor and flag of the country, will compare favorably with any similar establishment on earth, and with our own Army of any previous period of our history.

During the past year recruitment has been slow, by reason of the general prosperity of the country affording better employment to the class of men who generally enlist; but winter and hard times will soon enable us to fill our ranks with a good class of men, and reenlistments will increase by reason of the advantages the Army now holds out in the schools, in the better condition of the frontier posts, more abundant food and clothing, and the vastly diminished labor of the past by the completion of railroads to regions hitherto inaccessible except by long marches across arid, desolate plains. Now almost every post in the Army has railroad communication near, with mails, and connection by telegraph to all parts of the world. In my judgment, the condition of the Army, officers, and men, is incomparably better and more comfortable than it was twenty years ago.

For details of last year's work, and for progress in drill and rifle prac-

tice, I again invite your perusal of the inclosed reports of the generals, which are very full and most interesting, supplementing those of their own subordinates and staff, too voluminous to print, which, in manuscript, are on file, accessible to you at all times.

With great respect,

W. T. SHERMAN,
General

Hon. ROBERT T. LINCOLN,
Secretary of War.

REPORTS TO THE GENERAL OF THE ARMY.

1.—ANNUAL REPORT OF THE ADJUTANT-GENERAL TO THE GENERAL OF THE ARMY FOR THE YEAR 1881.

HEADQUARTERS OF THE ARMY,
ADJUTANT GENERAL'S OFFICE,
Washington, October 25, 1881.

GENERAL: Pursuant to your instructions, I have the honor to submit the annual returns of the Army:

- A.—Organization of the Regular Army.
- B.—Return showing actual strength of the Regular Army.
- C.—Distribution of troops in the Departments of Missouri, Texas, Platte, and Dakota—Division of the Missouri.
- D.—Distribution of troops in the Departments of the East and South—Division of the Atlantic.
- E.—Distribution of troops in the Departments of California, the Columbia, and Arizona—Division of the Pacific.
- F.—Department of West Point.
- G.—Military geographical divisions, departments, and posts, with distribution of troops, post offices, telegraph stations, and nearest railroad stations or boat landings.
- H.—Statement of casualties during the fiscal year ending June 30, 1881.
- I.—Statement of the number of trials of enlisted men by general courts martial during the fiscal year ending June 30, 1881.
- K.—Statement of assignments of recruits and re-enlistments during the fiscal year ending June 30, 1881.

The number of enlisted men, now in service, who are drawing increased pay under act of Congress of August 4, 1854, is as follows:

Five years' continuous service	3 890
Ten years' continuous service	1,934
Fifteen years' continuous service	319
Twenty years' continuous service	110
Twenty five years' continuous service	100
Thirty years' continuous service	50
Total	6,424

The number of those who will become entitled to increased pay, under act of Congress of May 15, 1872, during fiscal year ending June 30, 1883, is—

Re-enlisted pay	000
One dollar per month for third year of service	3 820
Two dollars per month for fourth year of service	3 634
Three dollars per month for fifth year of service	3,874
Total	11 928

while the number of enlisted men now in service whose terms will expire during the fiscal year ending June 30, 1883, is 3,596.

The above reports, compared with those in my last report, show an increase of 1,260 discharges, 13 deaths, and 318 desertions; and, while the death ratio is beyond human power to regulate, I am convinced that the increase in the number of discharges is ascribable to the growing prosperity of the country, and equally satisfied that the desertions are undoubtedly due mainly to the fact that men joining the Army at the several rendezvous are, from the necessities of the service, forwarded from the depots to regiments before they have learned the duties and responsibilities of a soldier. The sudden transition from the comparative freedom of civil life to the strict discipline of the Army discourages many who, under the impulse of a discontented mood, and perhaps, for the time being, in an irresponsible condition, are led to disregard the sacred obligations which they had assumed in all good faith. The remedy for this is pointed out in my remarks under the head of "The Recruiting Service," but it rests with Congress to give the necessary authority for carrying into successful operation the plan suggested and partially inaugurated.

The above view of the true cause of the increase of desertions is strengthened by the fact that of the men in the ranks who have already served one term of service 1,964 (or nearly 13 per cent. of the nominal strength of the Army) have re-enlisted during the past year—an increase of 510 over the number of re-enlistments during the year 1879-'80.

The officers of the Adjutant General's Department are properly assigned and in the discharge of their appropriate duties.

PROMOTION TO THE RANK OF FIELD OFFICER.

Paragraph 19, Army Regulations of 1863, prescribes that "all vacancies in established regiments or corps shall be filled by promotion according to seniority except in case of disability or other incompetency." This rule, under the established usage and custom of the service, requires that a vacancy in any one regiment of either of the three arms of the service shall be filled by the promotion of the senior officer of the lower grade, and that the officer promoted be commissioned in the particular regiment suffering the loss which created the vacancy. This system of promotion, although sanctioned by long years of practice, is open to grave objections. It sometimes happens that, during the permanent absence of the colonel of a regiment, through sickness or other cause, when the command necessarily devolves on either of the other field officers of the regiment, the latter lack the elements required for the successful discharge of the duties of a regimental commander, and, in such a case, no matter how zealous and efficient the company commanders may be, the regiment necessarily suffers loss in discipline and high tone; and to remedy this evil, so far reaching in its consequences, I beg to suggest that the best interests of the Army imperatively demand a change in the method of promotion to the rank of field officer below the grade of colonel, and this end can only be attained by promotion in the arm instead of commission in a particular regiment. In other words, on the happening of a vacancy, the officer entitled to promotion should be commissioned as "major of infantry," "lieutenant colonel of artillery," as the case may be, instead of, as at present, "major of the — regiment of infantry," &c. The effect of the proposed change will be to enable the General of the Army to assign field officers of the line to the particular regiment of the same arm in which their services may be of the greatest

ent, with a view to the highest efficiency of the regiment. This, it is believed, would obliterate an evil which at any time may, through neglect or despair, threaten the demoralization of a regiment otherwise composed of material not only able, but willing, to sustain its hard-earned reputation.

ARMY OFFICERS ABROAD.

But few of the officers who have enjoyed the privilege of visiting foreign countries have submitted reports of the results of their observations as is now required by orders; but from the well known professional abilities and acquirements of those now abroad, and such as may hereafter be afforded the opportunity of visiting foreign countries, it is believed much valuable scientific and military information may be obtained.

RESTORATION BY CONGRESS OF OFFICERS OUT OF SERVICE.

This most important subject so vitally affects the welfare and reputation of the whole Army that I beg most earnestly to reiterate my remarks on the subject made in my last report:

It is becoming the custom for officers dismissed by sentence of court martial and removed from the rolls of the Army to impetrate Congress for restoration to the position they have forfeited by the verdict of a court of their peers, reviewed and approved by a committee of command, and confirmed by the President of the United States. If a restoration is referred to the Committee on Military Affairs, and by it, in cases placed in the hands of a subcommittee, before whom the claimant appears personally or by attorney. The pressure of other duties not unfrequently prevents a subcommittee from giving the voluminous papers called for from the files of War Department that careful and searching scrutiny such a case demands, having view to the beneficial influence on the Army of the restoration to its rolls of a man until now a useless one. As a check on such claims, it is suggested that applicants for restoration be required, as a statutory enactment, to present their claims to a board of officers to be appointed by the President, whenever, in his opinion, the applicant has an equitable claim to a hearing.

VETERINARY SURGEONS.

By section 37 of the act of March 3, 1863—section 1102, Revised Statutes, the grade of veterinary surgeon was created with assimilated rank of sergeant major, and pay at the rate of \$75 per month. The law of July 28, 1866, section 3, added four regiments to the cavalry arm, with the same organization as provided by law for cavalry regiments, but with the addition of one veterinary surgeon to each regiment, whose compensation shall be one hundred dollars per month."

Thus, with precisely the same organization, *four* of the regiments have two veterinary surgeons, and *six* have but one, and at the lower rate of pay. If a cavalry regiment absolutely requires the services of two surgeons of that class, then all the regiments of that arm of the service should be placed on the same footing. In the contrary case, if only one is needed, then four of the ten regiments have one veterinary surgeon too many.

INFANTRY AND CAVALRY SCHOOL.

The gratifying results flowing from an enlargement of the field of professional acquirements and greater mental activity which have followed the establishment of a school of practice at Fort Monroe for the artillery arm of the service have long pointed out the advantages of establishing a school of application for infantry and cavalry similar to that above referred to, and orders were issued last May looking to the organ-

ization of a school at Fort Leavenworth, by assembling at that point at least four companies of infantry, four troops of cavalry, one light battery of artillery, and detailing for instruction one lieutenant of each regiment of infantry and cavalry, to be selected by the commander of the regiment and announced in general orders on or before the 1st of July of each alternate year, beginning with July, 1881, for the term of two years; the officers so detailed to be attached to the companies composing the school and to perform all the duties of company officers, in addition to those of instruction. The duty of carrying the above plan into execution was intrusted to the Lieutenant-General of the Army, and there is every prospect, although delay necessarily occurred by reason of inadequacy of officers' quarters at Fort Leavenworth, that ere long the school will be in successful operation, with, it is confidently hoped, marked benefit to those two arms of the service.

SIGNAL SCHOOL.

Signaling having become a necessary part of the military instruction of officers, a school of instruction has been established at Fort Myer, Virginia, and an annual detail authorized of eight officers, selected preferably from the lieutenants of the line of the Army who have served more than four years with their regiments and are possessed of sound health and good moral character, consideration being had also to service in the field, industry, soldierly habits, and aptitude for study.

RIFLE PRACTICE.

No teams from the Army participated this year in the Creedmore contest for marksmanship, owing to the limited appropriations from which the expenses for such contests could be defrayed. To counteract, as much as possible, the absence of this powerful incentive to effectiveness and to encourage general excellence in marksmanship in the Army the following plan has been adopted:

Three grades have been established for competition and Army prizes: 1st, the department; 2d, the division; and, 3d, the Army.

From the reports of the best firing at posts and camps and other available data the department commander will select the most suitable man from the class known as "marksmen" of each company, troop, or battery, and assemble them at some central post to contest for the honor of a place in the department team of twelve. In like manner the commander of each of the three military divisions will assemble at some convenient post in his division the several department teams to compete for a position in the division team of twelve, and for the following prizes: First prize, a gold medal of the value of one hundred dollars with a suitable inscription; to the next three, a marksman's rifle, with inscription on the butt; and to the remaining eight of the winning team of twelve each a silver medal of the value of five dollars.

Finally, every alternate year, beginning in 1882, the General of the Army, from the reports of rifle practice of the entire Army, will select a team of twelve of the best shots to compete for the Army prize. The first prize will be a gold medal, with suitable inscriptions, of the value of two hundred dollars; the three next, a marksman's rifle, with inscription; and the remaining eight, a silver medal of the value of ten dollars.

To the public spirited citizens of Nevada the Army is indebted for an additional prize to the company or battery excelling in target firing.

The badge sent by citizens of that State—a very handsome and valuable one—having been accepted by the General of the Army, is now in my hands pending award, and the following rules to govern the competition have been established and announced to the Army:

The competition for the trophy shall be open to all companies and batteries of the Army; the firing to be with the service arm and ammunition, and in strict accordance with the rules laid down in Laidley's *Artillery Firing*, supplemented by such as may, from time to time, issue from the Headquarters of the Army. The commanding officer of the champion company or battery will be the custodian of the trophy and its position noted on the Army Register.

INTOXICATING LIQUORS.

Early recognizing the baneful effects of intemperance on the morale and efficiency of the Army, resulting in individual cases in serious injuries to the mental and physical health, and leading inevitably to demoralization and disgrace, the sale of intoxicating liquors was, early in the year, by order of the President, prohibited at all the military posts and stations.

CERTIFICATES OF MERIT.

Section 1216, Revised Statutes, provides that when any *private soldier* shall have distinguished himself in the service, the President may award him a certificate of merit, on the recommendation of the colonel of his regiment.

To bring non-commissioned officers, as well as privates, within the purview of the above quoted section, it is suggested that it be amended by substituting for "private soldier" the words "enlisted man."

RECRUITING SERVICE.

The superintendencies of the General and Mounted Recruiting Service are still maintained at New York City and Jefferson Barracks, Missouri, respectively, with depots at David's Island, New York Harbor, and Columbus Barracks, Ohio, for the former and a subdepot for the latter in the city of New York.

At the date of my last report rendezvous had been established at the following points. Four in New York City; two in each of the cities of Boston (Massachusetts), Buffalo (New York), Baltimore (Maryland), Chicago (Illinois), Cincinnati (Ohio), Saint Louis (Missouri), and one each at Cleveland (Ohio), Harrisburg (Pennsylvania), Indianapolis (Indiana), San Antonio (Texas), San Francisco (California), and Washington (District of Columbia).

There being a government building at Pittsburgh, Pa., available for the purpose, the rendezvous at Harrisburg, Pa., was transferred to the latter city October 8, 1880, and on the 20th of the same month the rendezvous at Buffalo, N. Y., was removed to Louisville, Ky., where it remained until recently, when it was transferred to Milwaukee, Wis.

The rendezvous which had been opened in Richmond, Va., last November was removed in the following April to Charleston, S. C., and in September finally transferred to Providence, R. I.

In February of this year the rendezvous at San Antonio (Texas), San Francisco (California), and in this city were discontinued, and last May the low ebb of the recruiting appropriation necessitated the closing of those in Baltimore (Maryland) and Cincinnati (Ohio). Recruiting in

the Department of Texas and the Division of the Pacific was continued during the entire year, as it entailed no expenditure from the recruit fund, and the commanding generals of the Departments of Missouri, Platte, and Dakota were authorized to designate officers to recruit the regiments serving in these departments, the points designated being Fort Leavenworth (Kansas), Fort Omaha (Nebraska), and Fort Snelling (Minnesota).

The only organizations having their full complement of men were the colored regiments, and therefore recruiting for them was suspended in September, exception being made only in cases of men who, having honorably served one term of enlistment, desired to re-enter the service.

To remedy the serious injury to the efficiency of the recruiting service, resulting from the relief biennially of all the officers connected with that service and replacing the officers relieved by others necessarily inexperienced in the duties of recruiting officer, it was determined to inaugurate a new system, viz, of relieving yearly only one half of the officers engaged in this important duty; thus allowing the new details the benefit, during the first year of their tour, of the acquired knowledge and experience of the unrelieved officers of the previous detail.

The superintendents of the General and Mounted Recruiting Service have been ordered to break up what were known as the "permanent companies" at the depots and replace them by the following organization of the recruits: four companies to be organized at each depot, to be known as "companies of instruction," and to consist, each, of not less than eighty men, with six sergeants, who shall be permanent; each company, as nearly as possible, to be composed of twenty four-months' men, twenty three-months' men, twenty two months' men, and twenty one month men, or, in other words, dividing the recruits into four classes according to the length of time they have been in the service. Recruits arriving at the depots to be assigned to these companies. Men entering the service to be considered as recruits of the first class and assigned as such. The clerks, band, company cooks, extra-duty men, &c., at each depot to be organized under the command of the depot adjutant and be known as the "depot detachment." Each company of instruction to furnish at least three men for duty as assistant cooks, so that they may be properly and fully instructed in this important duty, and the details to be so regulated as to have always four, three, two months' men under instruction; only four months' men being available to regiments.

As an encouragement to faithful and deserving non-commissioned officers serving at distant stations, and the better to promote the efficiency of the recruiting service, a number of sergeants, not to exceed eight, will be annually detailed from the infantry and cavalry regiments for service at the general depots, in the proportion of three to each of the General Service depots and two to that of the Mounted Service.

To inaugurate this system a sergeant (actually with his regiment) to be selected by the regimental commanders of the first six regiments of infantry and from the First and Second Regiments of Cavalry, were ordered by them to report to the Superintendents of the General and Mounted Recruiting Service, respectively, on the 1st of July last. The details are, as a rule, to be for one year; at the expiration of which the men will be relieved by sergeants selected from such other regiments of infantry and cavalry as may be indicated from general headquarters.

The recruiting service has, under the impulse of the new system, furnished the Army with excellent men, who are prepared at the depot to at once enter upon company duty as soon as they join the regiments.

to which assigned, instead of, as formerly, having to undergo the settling-up process at posts and, possibly, in the field, where it was necessarily done in a very unsatisfactory manner. An opportunity, moreover, is afforded under the present arrangement of culling out worthless men before sending them, at considerable expense, to distant stations.

The table marked L, exhibits in detail the nativities and occupation of accepted recruits, and the divers causes leading to the rejection of a large number of the applicants for enlistment.

As stated in my last report, the percentage of accepted recruits was not quite 22 per cent. of the total number of men offering themselves for enlistment. An examination of the table shows that the percentage during the past year reached nearly 23 per cent., evidencing a perceptible increase in the moral and physical tone of applicants.

For the reasons given in my last report, to which I beg to call your attention, and to give the service the full benefit of the new system, I earnestly renew the recommendation that one thousand men, in excess of the present authorized strength of the Army, be allowed for thorough instruction at the depots.

Respectfully submitted.

R. C. DRUM,
Adjutant-General.

General W. T. SHERMAN,
United States Army.



	General	Lieutenant-General.	Major-generals	Adjutant-generals
General officers	1	1	3	
Military secretary to the Lieutenant-General				
Aides de camp to general officers				
Adjutant-General's Department				
Inspector-General's Department				
Bureau of Military Justice				
Quartermaster's Department				
Subsistence Department				
Medical Department				
Pay Department				
Corps of Engineers				
Ordnance Department				
Signal Corps				
Post chaplains				
First Regiment of Cavalry				
Second Regiment of Cavalry				
Third Regiment of Cavalry				
Fourth Regiment of Cavalry				
Fifth Regiment of Cavalry				
Sixth Regiment of Cavalry				
Seventh Regiment of Cavalry				
Eighth Regiment of Cavalry				
Ninth Regiment of Cavalry				
Tenth Regiment of Cavalry				
Aggregate of cavalry				
First Regiment of Artillery				
Second Regiment of Artillery				
Third Regiment of Artillery				
Fourth Regiment of Artillery				
Fifth Regiment of Artillery				
Aggregate of artillery				
First Regiment of Infantry				
Second Regiment of Infantry				
Third Regiment of Infantry				
Fourth Regiment of Infantry				
Fifth Regiment of Infantry				
Sixth Regiment of Infantry				
Seventh Regiment of Infantry				
Eighth Regiment of Infantry				
Ninth Regiment of Infantry				
Tenth Regiment of Infantry				
Eleventh Regiment of Infantry				
Twelfth Regiment of Infantry				
Thirteenth Regiment of Infantry				
Fourteenth Regiment of Infantry				
Fifteenth Regiment of Infantry				
Sixteenth Regiment of Infantry				
Seventeenth Regiment of Infantry				
Eighteenth Regiment of Infantry				
Nineteenth Regiment of Infantry				
Twentieth Regiment of Infantry				
Twenty-first Regiment of Infantry				
Twenty-second Regiment of Infantry				
Twenty-third Regiment of Infantry				
Twenty-fourth Regiment of Infantry				
Twenty-fifth Regiment of Infantry				
Aggregate of infantry				
Captain in the United States Army by act of Congress				
Non-commissioned staff unattached to regiments				
West Point detachments				

MILITARY ACADEMY.

	Trumpeters.	Musicians.	Farmers and blacksmiths.	Artificers.	Saddlers.	Wagoners.	Privates, first class.	Privates, second class.	Privates.	Total.	Professors.	Cadets.	Aggregate
													11
													17
													5
													8
													64
													26
										181			308
													35
16		3					80	70		199			310
68							152	120		404			467
27							(c) 234	(c) 84		(c) 495			500
													30
40	22		33		11	2			454	629			672
42	19		21		12	5			439	615			658
44	24		23		12	9			483	673			715
44	20		21		10	8			511	689			732
42	21		21		11	3			492	668			710
45	18		22		12	4			510	686			729
48	20		20		12	8			519	696			739
48	21		21		12	7			519	704			748
40	22		22		11	1			546	716			760
39	18		24		12				564	729			773
430	205		218		116	47			5,037	6,802			7,536
45		23		10					350	495			551
41		22		4		1			372	508			564
37		22		6		2			373	506			569
41		23		2		3			340	471			529
35		30		3		1			238	420			476
110			25		6				1,783	2,400			2,683
82	18			1					336	435			471
80	14			1					348	447			482
31	20			1					293	398			433
33	20			2					234	343			378
33	19			6		1			308	418			454
30	17			1					294	404			438
37	18			4		1			353	466			501
34	18								324	430			465
35	17			2					261	369			404
28	17			7					224	329			364
26	20			2					217	328			364
25	17			4					333	441			476
28	11								271	358			393
37	17			1					306	414			449
34	18								326	427			462
36	19			1					339	446			484
39	18			3					269	393			418
30	18								238	333			368
34	19			1					344	453			488
31	12								355	453			488
37	20								352	461			498
34	16								324	427			462
30	15			4					280	361			396
34	14								328	422			458
30	16								340	443			479
394	428		39		2				7,585	10,191			11,072
													1
										262			262
11	4	1							162	191			191

C.—Position and distribution of troops in the Military Division of the Missouri, the latest returns on file.

		HEAD QUARTERS		DEPARTMENT	
POSTS	SITUATIONS	COMMANDING OFFICER	Number of companies	Regiments	General officers Major and Adjutant-General's Department
DEPARTMENT OF THE MISSOURI				Division Staff	1 2 3 4
Headquarters	Fort Leavenworth, Kans.	Brig Gen John Pope		Department staff	1 2 3 4
Santa Fe N M	Headquarters District of New Mexico	Col Edward Hatch, 9th Cav.		Headquarters 9th Cav	
Fort Bayard N M	Near Pecos Mts	Lieut Col P T Swain 1st Inf	4	9th Cav and 15th Inf	
Fort Craig, N M	3 miles from San Marcial	Capt J W Bean, 15th Inf	2	9th Cav and 15th Inf	
Fort Cummings, N M	At Cook's Springs	Maj N W Osborne 15th Inf	2	9th Cav and 15th Inf	
Fort Marcy N M	At Santa Fe	Capt Chambers McKibbin, 15th Inf	1	15th Inf	
Fort Selden, N M	Near Dona Ana	Capt L H Rucker 9th Cav	2	9th Cav and 15th Inf	
Fort Stanton, N M	On the Rio Bonilla	Maj G V Henry 9th Cav	4	9th Cav and 15th Inf	
Fort Union, N M	3 miles from the More	Maj J J Van Horn 13th Inf	1	15th Inf	
Fort Wingate, N M	At the headquarters of the Rio Puerco	Col I P Bradley 13th Inf	8	9th Cav and 13th Inf	
Fort Garland Colo		2d Lieut S J Mullhall 14th Inf		Detachment 14th Inf	
Fort Lyon Colo	Near Las Animas	2d Lieut F S Calhoun 14th Inf		Detachment 14th Inf	
Fort Lewis, Colo	Near the Rio La Plata	Lieut Col H E A Crofton 14th Inf	5	14th Inf	
White River, Colo	Near White River agency	Col L C Hunt, 14th Inf	5	14th Inf	
Uncompaggre, Colo	Near Los Pinos agency	Col R S Mackenzie 4th Cav	15	4th Cav 14th Inf and 2d Inf	
Fort Bliss, Tex	Near El Paso	Capt H R Brinkerhoff 15th Inf	3	4th Cav and 15th Inf	
Fort Elliott, Tex	On Sweetwater Creek	Maj H L Noyes, 4th Cav	2	4th Cav and 24th Inf	
Fort Dodge, Kans	5 miles from Dodge City	Col G O Haller 2d Inf	2	23d Inf	
Fort Hays, Kans	Near Hays City	Lieut Col Z R Adams 19th Inf	2	19th Inf	
Fort Leavenworth, Kans	3 miles above Leavenworth City	Col F H Smith, 19th Inf	8	19th Inf	
Fort Leavenworth Military Prison, Kans	At Fort Leavenworth	Capt A P Blunt, Q. M. Department		Prison guard	
Fort Riley, Kans	3 miles from Junction City	1st Lieut A M Patch 4th Cav		Detachment 4th Cav	
Fort Wallace, Kans	2 miles from Wallace Station	Capt J T Husker 1 2d Inf	1	23d Inf	
Fort Totten Ind I	7 miles from Gibson Station	Maj R H Olney 19th Inf	2	19th Inf	
Camp Point on North Fork of Canadian River Ind. T.	On North Fork of Canadian River	Maj R F O Belme 24th Inf	4	4th Cav and 24th Inf	
Fort Reno, Ind I	Near Cassarea and Arapaho agency	Capt G M Randall 2d Inf	6	4th Cav, 2d and 24th Inf	
Fort Sill Ind I	On Medicine Bluff Creek	Maj J K Manner 4th Cav	6	4th Cav and 24th Inf	
Fort Supply Ind I	Near Medicine and Wolf and Beaver creeks	Col J H Potter 24th Inf	2	4th Cav	
Camp on Snake River, Wyo	6 miles south of Rawlins	Capt G S Carpenter 14th Inf	1	14th Inf	
Total			74		1 2 3 4

compiled by Lieutenant General P. H. Sheridan, headquarters Chicago, Ill., taken from
Adjutant-General's Office, 1861

Qualifications as Described in Schedule of Service	PRESENT					ABSENT					AGGREGATE				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Major-General	1					12	10	41				19	10		
Brigadier-General						30	8	38	1	1	1	9	1		39
Colonel						215	13	228		2	1	3	15	226	241
Lieutenant-Colonel						90		132		2	1	5	106	107	
Major						94	8	102		1	2	1	7	106	1
Captain						58	3	41		1		1	7	59	4
First Lieutenant						99	5	104	1	1	1	2	107	109	109
Second Lieutenant						212	12	224	1	1	1	8	17	215	222
Enlisted men						44	0	50		1	1	2	7	47	
Total commissioned						402	21	423	2	5	16	37	58	418	445
Aggregate						14	1	17				1	14		
General and staff officers						13	3	16					13		
Field and garrison officers						17	14	31	1	2	3	1	17	31	31
Captains						207	17	224	1	2	6	1	207	214	222
Subalterns						625	41	666	1	9	12	1	647	677	677
Enlisted men						112	8	120				10	122	132	
Total commissioned						77	4	81	2	2	1	4	83	87	87
Aggregate						81	10	91	1	1	1	2	94	103	103
Commissioned officers						83	0	83	1	1	1	7	90	94	94
Enlisted men						70	21	91	1	2	1	6	79	87	87
Aggregate						8	7	15				7	15		
Commissioned officers						27	4	31				4	35	39	39
Enlisted men						31	3	34		1	1	4	37	41	41
Aggregate						87	4	91	2	1	1	4	95	100	100
Commissioned officers						165	14	179	1	2	1	3	180	187	187
Enlisted men						270	1	271	3	2	1	6	282	291	291
Aggregate						300	17	317				17	334	358	358
Commissioned officers						130	11	141	1		1	4	136	147	147
Enlisted men						42		42				3	45	49	49
Aggregate						141	3,859	295	4,254	50	34	69	547	4,301	4,382

C—Position and distribution of troops

GARIBOLDI

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POSTS	SITUATIONS	COMMANDING OFFICER	Number of companies	Regiments	General officers	Military secretary	Adjutant-General's Department
DEPARTMENT OF TEXAS							
Headquarters	San Antonio Tex	Bvt Maj Gen C C Argu	Dep't of Tex	1	1		
Fort Brown Tex	At Brownsville	Col E S Oles	2	8th Cav and 20th Inf			
Fort Clark Tex	At Brackettville	Col D S Smith	1	8th Cav and 2d Inf			
Fort Concho Tex	At junction of Myn and North Conchos	Col P H Garrison	1	1st Cav and 1st Inf			
Fort Davis Tex	Near Llano, in Creek	Col W R Stauffer	2	1st Cav and 1st Inf			
Fort Duncan Tex	At Eagle Pass	Lt Col A J Dallas	1	8th Cav and 2d Inf			
Fort McIntosh Tex	At Llanero	Maj S S Sumner	1	8th Cav and 2d Inf			
Fort M. K. Vett Tex	On San Sabal River	Col G. Thompson	1	16th Inf			
Fort Ruggs Id Tex	At Ruggs Id	Maj C B Latta	4	8th Cav and 20th Inf			
Fort Stockton Tex	At Comanche Springs	Lt Col J F Wade	4	10th Cav and 1st Inf			
San Antonio Tex	.....	Col C J Drake	2	16th and 22d Inf			
Total	.....		65		1		2
DEPARTMENT OF WYOMING							
Headquarters	Fort Omaha Nebr	Bvt Maj Gen George Crook	Dep't of Wyo	1	1		
Fort Bridger Wyo	1 mile from Carter's Station	Capt Wm H Barber	2	4th Inf			
Cheyenne Depot Wyo	At Cheyenne	Capt Edward Lock	1	9th Inf			
Fort D. A. Russell Wyo	Near Cheyenne	Col A G Brackett	1	3d Cav and 4th Inf			
Fort Fetterman Wyo	83 miles from Lock Creek	Maj W T Gregory	2	4th Inf			
Fort Fred Steele Wyo	On the bank of the Union Pacific R R	Maj A W Evans	1	3d Cav and 4th Inf			
Fort Laramie Wyo	Near mouth of Laramie River	Col Wesley Merritt	1	7th Cav and 9th Inf			
Fort McKim Wyo	On Clear Fork Creek	Lt Col T M A. Benson	1	9th Inf			
Fort Sanders Wyo	On the bank of the Union Pacific R R	Lt Col E C Mason	4	3d Cav and 4th Inf			
Fort Washakie Wyo	147 miles from Fort Laramie	Maj J W Mason	2	3d Cav			
Fort Carey Wyo	At Beaver	Lt Daniel H. Reed	2	6th Inf			
Fort Douglas Id	Near Salt Lake City	Col A. McD. McCook	3	6th Inf			
Fort Fossil Id	At Fossil	Capt J S Hawkins	4	6th Inf			
Fort Hall Id	At Hall	Capt Stephen Barker	1	6th Inf			
Fort Niobrara Nebr	On the bank of the Niobrara River	Capt R H Montgomery	4	1st Cav and 10th Inf			
Fort Omaha Nebr	On the bank of the Missouri River	Col J H. Keiser	3	9th Inf			
Fort Robinson Nebr	At Fort Robinson	Maj J A. Smith	1	10th Cav and 1st Inf			
Fort Sully Nebr	Near Sully	Lt Col J. L. Smith	4	1st Cav and 1st Inf			
Total	.....		74		1		3

MILITARY ACAD.
EMY.

Trumpeters.	Musicians.	Farriers and blacksmiths.	Artificers.	Saddlers.	Wagoners.	Privates, first class.	Privates, second class.	Privates.	Total.	Professors.	Cadets.	Aggregate.
												11
												17
												5
												6
												64
												26
									181			368
	3					80	70		190			55
						152	120		404			310
						(c) 234	(c) 84		(c) 495			467
												500
												30
22		23		11	2			454	629			672
19		21		12	5			439	615			658
24		23		12	9			463	672			715
20		21		10	8			511	689			732
21		31		11	3			492	660			710
18		22		12	4			510	688			729
20		20		12	8			519	696			739
21		21		12	7			519	704			748
22		22		11	7			546	718			760
18		24		12				564	729			773
305		218		115	47			5,037	6,802			7,236
23		10						350	495			551
22		4			1			372	508			564
22		6			2			373	506			563
23		2			2			340	471			520
20		3			1			298	420			476
110		25			6			1,733	2,400			2,683
18								330	435			471
14		1						348	447			493
20		1						293	398			433
20		2						234	343			378
19		6			1			308	418			454
17		1						294	404			439
18		4			1			353	468			501
18								324	430			466
17		2						261	369			404
17		7						224	329			364
20		2						217	328			364
17		4						333	441			476
11								271	358			393
17		1						306	414			449
18								326	427			462
19		1						339	448			484
18		2						269	383			416
18								238	333			366
19		1						344	453			488
12								355	453			488
20								352	461			496
16								324	427			462
15		4						260	361			396
14								328	422			458
16								349	443			479
428		39			2			7,585	10,191			11,073
												1
									262			362
4	1							162	191			191



D.—Position and distribution of troops in the Military Division of the Atlantic, commencing
latest returns on file in the

		GARRISONS		PRESENT	
POSTS	SITUATIONS	COMMANDING OFFICER	Number of companies	Regiments	Adjutant General's Department
DEPARTMENT OF THE EAST			Division staff	1	2
Headquarters	Governor's Island N Y	Maj Gen W S Hancock	Department staff		
Fort Adams R I	Near Newport	Capt F L Taylor 1st Art	4 1st Art	....
Fort Warren Mass	In Boston Harbor	Lt Col C L East 1st Art	2 1st Art	....
Fort Preble Me	Near Portland	Capt W L Haskins 1st Art	1 1st Art	....
Fort Trumbull Conn	At New London	Capt R T Frank 1st Art	2 1st Art	....
Fort Brady Mich	Near Sault Ste Marie	Capt E C Ross 10th Inf	2 10th Inf	....
Fort Mackinac Mich	Mackinac Island	Capt E E Sellers 10th Inf	2 10th Inf	....
Fort Wayne Mich	Near Detroit	Col H B Catz 10th Inf	4 10th Inf	....
Fort Columbus N Y	Governor's Island	Maj John A. Mendenhall 1st Art	2 1st Art	....
Fort Hamilton N Y	New York Harbor	Lt Col G A De Russay 3d Art	4 3d Art	....
Mulson Barracks N Y	Sackett's Harbor	Capt J R Kelly 3d Art	1 3d Art	....
Fort Niagara N Y	Near Youngstown	Capt J L Tiernon 3d Art	1 3d Art	....
Plattsburg Barracks N Y	Near Plattsburg	Capt Lewis Smith 3d Art	1 3d Art	....
Fort Porter N Y	At Buffalo	Lt Col H R Mizner 10th Inf	2 10th Inf	....
Fort Schuyler N Y	At Throgs Neck	Capt F F Barstow 3d Art	2 3d Art	....
Fort Wadsworth N Y	New York Harbor	Maj H G Gibson 3d Art	2 3d Art	....
Fort McHenry Md	Baltimore	Lt Col A P Howe 2d Art	2 2d Art	....
Washington Barracks D C	Washington	Col R B Ayres 2d Art	3 2d Art	....
Fort Monroe Va	.....	Bvt Maj Gen G W Getty, Col 3d Art	5 1st 2d 3d 4th and 5th Art	....
Total	.....	.....	44	.....
DEPARTMENT OF THE SOUTH					
Headquarters	Newport Barracks, Ky	Bvt Brig Gen H J Hunt Col 5th Art	.....	
Atlanta Ga	.....	Lt Col John Hamilton 5th Art	7 3d and 5th Art	....
Fort Brooke Fla	Tampa Bay	Capt D H Kinzie 5th Art	2 5th Art	....
Fort Barrancas, Fla	Pensacola Harbor	Maj H. W. Closson 5th Art	Detachment 5th Art	....
Saint Augustine, Fla	.....	Maj R H Jackson 5th Art	2 5th Art	....
Little Rock Ark	.....	Capt C A Woodruff 2d Art	1 2d Art	....
Hot Springs, Ark	.....	1st Lt A C Taylor 2d Art	1 2d Art	....
Newport Barracks Ky	At Newport	Capt F L Greuther 5th Art	1 5th Art	....
Total	.....	.....	14	.....
Grand total	.....	.....	58	.....

ADJUTANT GENERAL'S OFFICE
Washington D C October 25 1861

General W. S. Hancock, headquarters Governor's Island, New York taken from the
the *the* 1881.

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E.—Position and distribution of troops in the Military Division of the Pacific, from latest returns on file.

		APRIL 1888		FEBRUARY 1889	
POSTS.	SITUATIONS	COMMANDING OFFICER	Number of companies	Regiments	General officers
					Major secretary
					Adjutant-General
					Adjutant-General's Department
				Division staff	1 1 1
DEPARTMENT OF CALIFORNIA					
Headquarters . . .	Presidio, San Francisco, Cal.	Major Gen. Irvin McDowell	1	Department staff	1 1 1
Alcatraz Island, Cal.	In San Francisco Harbor	Capt. Arthur Morris	2	4th Art.	1 1 1
Angel Island, Cal.	do	Col. A. V. Kautz	3	8th Inf.	1 1 1
Benicia Barracks, Cal.	At Benicia, Cal.	Lt. Col. J. D. Watkins	2	do	1 1 1
Fort Bidwell, Cal.	In Surprise Valley	Capt. Henry Wagner	2	1st Cav. and 8th Inf.	1 1 1
Fort Point, Cal.	In San Francisco Harbor	Capt. H. C. Cushing	3	4th Art.	1 1 1
Fort Guston, Cal.	In Hoopa Valley	Capt. F. B. Savage	1	8th Inf.	1 1 1
Point San Jose, Cal.	In San Francisco Harbor	Capt. C. B. Throckmorton	1	4th Art.	1 1 1
Presidio, Cal.	At San Francisco	Lt. Col. G. P. Andrews	3	do	1 1 1
Fort Halleck, Nev.	12 miles south of Hall's Station	Major G. B. Sanford	2	1st Cav. and 8th Inf.	1 1 1
Fort McDermott, Nev.	8 miles north of Winnemucca	Capt. R. F. Bernard	1	1st Cav.	1 1 1
Total . . .			29		1 1 1
DEPARTMENT OF THE COLUMBIA					
Headquarters . . .	Vancouver Barracks, Wash.	Brig. Gen. N. A. Miles	1	Department staff	1 1 1
Boise Barracks, Idaho	Near Boise City	Major G. H. Hunt	2	1st Cav. and 21st Inf.	1 1 1
Fort Conrad, Idaho	Near Conrad, Idaho	Col. Frank Wheaton	4	2d Inf.	1 1 1
Fort Lapwai, Idaho	Near Lewiston	Major A. G. Force	2	1st Cav. and 21st Inf.	1 1 1
Fort Canby, Wash.	Mouth of Columbia River	Major W. M. Graham	4	4th Art.	1 1 1
Fort Colville, Wash.	In Colville Valley	Lt. Col. H. C. Merriam	3	1st Cav. and 21st Inf.	1 1 1
Camp Spokane, Wash.	Near Spokane Falls	Major L. H. Smith	4	2d Inf.	1 1 1
Vancouver Barracks, Wash.	18 miles north of Port Townsend	Lt. Col. Alexander Campbell	4	1st Inf.	1 1 1
Fort Townsend, Wash.	Near Port Townsend	Capt. Robert Pollock	2	do	1 1 1
Fort Walla Walla, Wash.	At Walla Walla	Col. J. M. Crocker	5	1st Cav.	1 1 1
Fort Klamath, Oreg.	Near Lake Klamath	Capt. S. G. Whipple	2	1st Cav. and 21st Inf.	1 1 1
Fort Stevens, Oreg.	Mouth of Coquille River	Lt. Col. F. E. Elwood	1	2d Inf.	1 1 1
Total . . .			33		1 1 1

May 1881, Irvin McHowell, headquarters Piedra, San Francisco, Cal., taken from the Adjutant-General's Office 1881

PRESENT										ABSENT			AGGREGATE		
Infantry	Cavalry	Artillery	Engineers	Medical	Quartermasters	Subalterns	Enlisted men.	Total commissioned.	Aggregate	Commissioned officers	Enlisted men.	Aggregate.	Commissioned officers	Enlisted men.	Aggregate.
1	1						10	11	27				11	10	27
							4	4					4		4
						4	79	83		2	1	2	1	8	83
1	1					3	141	144	154	1	1	2	3	16	157
						2	68	70	79	1	7	1	8	7	82
						3	101	104	106	1	1	2	3	7	109
						3	94	97	102	4	3	4	7	12	109
						1	43	44	46				3	43	46
						1	39	40	43	1	1	1	2	5	45
1	1					7	162	169	177	2	5	5	10	20	167
						2	80	82	91	2	2	2	4	7	95
						1	50	51	52	1		1	1	3	53
1	2	1	2	1	20	2	34	803	71	954	1	3	26	21	975
1	1	1					12	12	24				12	12	24
						1	90	91	101	3		3	3	8	104
						6	180	186	203	2	6	2	8	16	211
						1	80	81	94	1	1	1	2	7	97
						5	30	35	67	1	1	2	2	10	60
						3	135	138	141	1	3	4	7	10	148
						6	151	157	161	2	2	3	4	14	168
						6	190	196	211	1	2	3	4	18	215
						2	75	77	80	2	1	2	3	7	83
						7	350	357	376	2	3	5	9	22	385
						3	104	107	109	1	5	1	6	6	115
						2	44	46	46	1	1	1	2	3	48
1	2	4				44	1 509	194	1 615	3	6	20	25	54	1 607

E.—Position and distribution of troops in

		GARRISONS		PRESENCE	
POSTS.	SITUATIONS	COMMANDING OFFICER	Number of companies	REG'T	COMP
DEPARTMENT OF ARIZONA					
Headquarters	Whipple Barracks, Ariz.	Bvt. Maj. Gen. G. B. Willcox	1	Regiment staff	2 1
Fort Apache, Ariz.	In White Mountain Country	Col. L. A. Carr	1	6th Cav. and 12th Inf.	..
Fort Bowie, Ariz.	At Apache Pass	Capt. W. A. Rafferty	2	do	..
Fort Grant, Ariz.	At foot of Mount Graham	Maj. James Bush	1	do	..
Camp Huachuca, Ariz.	In Huachuca Mountains	Capt. T. C. Tupper	2	do	..
Fort Lowell, Ariz.	Near Tucson	Capt. C. B. McLellan	1	6th Cav.	..
Fort McDowell, Ariz.	32 miles north of Maricopa Wells	Capt. A. B. Chaffee	3	6th Cav. and 12th Inf.	..
Fort Mojave, Ariz.	Near Mojave City	Capt. E. C. Woodruff	1	12th Inf.	..
Camp Thomas, Ariz.	Near old Fort Goodwin	Capt. J. L. Viven	3	6th Cav. and 12th Inf.	..
Fort Verde, Ariz.	36 miles from Prescott	Lt. Col. W. R. Price	2	6th Cav.	..
Whipple Barracks, Ariz.	At Prescott	Capt. H. C. Egbert	2	12th Inf.	..
San Diego Barracks, Cal.	At San Diego	Capt. G. M. Brayton	1	8th Inf.	..
Fort Yuma, Cal.	Near Yuma, Ariz.	Capt. A. T. Smith	1	do	..
Total			24		2 1
Grand total			75	2	4 8

ADJUTANT GENERAL'S OFFICE
Washington, D. C. October 25, 1881

Military Division of the Pacific, &c.—Continued.

PRESENT.																	ABSENT.							AGGREGATE.					
Quartermaster's Department.	Subsistence Department.	Medical Department.	Pay Department.	Corps of Engineers.	Ordnance Department.	Post chaplains.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Captains.	Regimental chaplains.	Regimental adjutants.	Regimental quartermasters.	Subalterns.	Enlisted men.	Total commissioned.	Aggregate.	General and staff officers.	Field and regimental staff officers.	Captains.	Subalterns.	Enlisted men.	Total commissioned.	Aggregate.	Commissioned officers.	Enlisted men.	Aggregate.	
12	1	1	4					1								11	10	21								10	11	21	
		1						1	1	2		1	4	187	10	197	10	197		1	2	1	3	4	13	188	201		
										2			4	124	6	130	6	130					3		3	6	127	133	
	1					1			1		1		4	142	8	150	8	150		2	2	3	4	7	12	145	157		
											1		12	124	11	127	11	127		1	2	3	3	6	6	127	143		
	1										1	1	2	67	5	72	5	72								5	67	72	
											3		3	175	6	181	6	181				3	1	3	4	9	176	185	
											1		1	40	2	42	2	42				1	1	1	2	3	41	44	
	1	1									1			5	154	8	162	8	162	1	2	1	2	4	6	12	156	168	
		1						1	1		1		3	84	6	90	6	90		1	1	12	2	14	8	96	104		
		1								2	1	1	3	105	8	113	8	113	1		1		2	2	10	105	115		
											1			2	46	2	49	2	49					2		2	3	48	51
		1									1			2	33	4	37	4	37					3		3	4	36	40
3	1	7	4	1		1		2	1	2	17		2	2	35	1,193	79	1,271		2	7	13	31	22	59	101	1,223	1,324	
8	4	22	12	3	1	3		5	5	7	62		7	7	113	3,580	265	3,845	1	8	13	49	77	71	146	335	3,657	3,993	

R. C. DRUM,
Adjutant-General.

F.—Department of West Point commanded by Brigadier-General O. O. Howard,
quarters West Point, N. Y., 1881

Present

General officers .....	.....
Aides de camp .....	.....
Bureau of Military Justice .....	.....
Quartermaster Department .....	.....
Subsistence Department .....	.....
Medical Department .....	.....
Corps of Engineers .....	.....
Ordnance Department .....	.....
Professors .....	.....
Major .....	.....
Captains .....	.....
Subalterns .....	.....
Swordmaster .....	.....
Cadets .....	.....
Enlisted men .....	.....
Total commissioned .....	.....
Aggregate .....	.....
Ablest	
Subalterns .....	.....
Cadets .....	.....
Enlisted men .....	.....
Total commissioned .....	.....
Aggregate .....	.....
Aggregate	
Commissioned officers and cadets .....	.....
Enlisted men .....	.....
Aggregate .....	.....

R. C. DRUM

Adjutant General

ADJUTANT GENERAL B. DEEDER

Washington, D. C. October 25, 1881

1. —Nativity and occupation of accepted recruits, and availability of rejected applicants

Nativities	Accepted.		Occupations.	Rejected.		Cause of rejection	White.
	White.	Colored.		White.	Colored.		
Alabama	15	8	Architects	1		Minors	2 429
Alaska	1		Bakers	81		Married men	305
Arizona	1		Barbers	51		Wagons with chil- dren	12
Arkansas	9	1	Blacksmiths	117		Unemployed	406
California	13		Bookkeepers	4		Overweight	29
Colorado	1		Bosses and laborers	5		Underweight	241
Connecticut	66		Bricklayers	27		Overweight	287
Delaware	27	4	Broom makers	1		Overweight	742
District of Columbia	1	11	Butchers	68		Medical service	68
Florida	4	2	Calico makers and up holders	24	1	Maintained without character	9
Georgia	12	4	Carpenters	121		Low average	22
Illinois	119	2	Carpenters	1		Insufficient knowledge	1 208
Indiana	217		Carpenters	1		Insufficient	2 588
Iowa	25		Carpenters	3		Insufficient	9 914
Kansas	2	1	Carpenters	3		Insufficient	37
Kentucky	150	17	Clocks	77		Insufficient	606
Louisiana	11	7	Clocks	17		Insufficient	37
Maine	71		Clocks	20		Insufficient	22
Maryland	180	65	Clocks	21		Insufficient	236
Massachusetts	16	2	Clocks	47		Insufficient	56
Michigan	30	1	Clocks	21		Insufficient	103
Minnesota	2		Clocks	21		Insufficient	223
Mississippi	9		Clocks	21		Insufficient	17
Missouri	4	1	Clocks	21		Insufficient	43
Nebraska	1		Clocks	21		Insufficient	31
New Hampshire	31		Clocks	21		Insufficient	2
New Jersey	106	1	Clocks	21		Insufficient	5
New York	705	8	Clocks	21		Insufficient	1
North Carolina	4	2	Clocks	21		Insufficient	6
Ohio	44	6	Clocks	21		Insufficient	31
Oregon	2		Clocks	21		Insufficient	2
Pennsylvania	78	22	Clocks	21		Insufficient	5
Rhode Island	27		Clocks	21		Insufficient	1
South Carolina	41	2	Clocks	21		Insufficient	6
Tennessee	30	29	Clocks	21		Insufficient	31

1.— *Nativity and occupation of accepted recruits, and disability of rejected applicants—Continued.*

Accepted.			Rejected.					
Nativity.	White.	Colored.	Occupations.	White.	Colored.	Cause of rejection.	White.	Colored.
Texas.....	7	1	Molders.....	47	...	Periostitis.....	8	...
Vermont.....	29	...	Musicians.....	174	7	Frost bitten.....	6	...
Virginia.....	97	79	Painters.....	117	...	Fracture of tibia.....	1	...
West Virginia.....	39	...	Photographers.....	4	...	Enlarged spleen.....	3	...
Wisconsin.....	29	...	Physicians.....	1	...	Hernia.....	334	21
Africa.....	1	...	Plasterers.....	11	1	Phthisis.....	45	1
Austria.....	22	...	Plate-printers.....	1	...	Hydrocele.....	10	...
Australia.....	1	...	Plumbers and gas-	23	...	Varicocele.....	136	4
Brazil.....	3	...	fitters.....	...	...	Cirsocele.....	34	1
Canada.....	131	...	Porters.....	29	3	Varicose veins.....	796	11
Denmark.....	39	...	Printers.....	51	...	Hemorrhoids.....	185	2
England.....	226	...	Rope makers.....	2	...	Indurated glands.....	5	...
France.....	23	...	Saddlers and harness-	36	...	Stricture of urethra.....	4	...
Germany.....	527	...	makers.....	...	...	Atrophy of testicles.....	8	...
Holland.....	8	...	Sail makers.....	2	...	Pendulous testicles.....	4	...
Ireland.....	664	...	Sailors.....	114	4	Syphilis.....	509	43
Italy.....	7	...	Salesmen.....	29	...	Gonorrhea.....	52	2
Mexico.....	2	...	School teachers.....	17	2	Phymosis.....	6	...
Norway.....	15	...	Shoemakers.....	101	6	Bronchitis.....	1	...
Nova Scotia.....	15	...	Soldiers.....	744	41	Fractures.....	31	...
Poland.....	6	...	Stone masons.....	38	...	Fistula in ano.....	2	...
Romania.....	2	...	Tailors.....	77	...	Tumors.....	3	...
Russia.....	19	...	Teamsters and hostlers	303	17	Orchitis.....	5	...
Scotland.....	54	...	Telegraph operators.....	14	...	Asthma.....	1	...
South America.....	1	...	Tinners.....	39	...			
Sweden.....	23	...	Turners.....	1	...			
Switzerland.....	35	...	Veterinary surgeons.....	1	...			
Wales.....	3	...	Waiters.....	34	28			
West Indies.....	6	1	Weavers.....	42	...			
			Wheelwrights.....	13	...			
			Miscellaneous.....	314	1			
	5,379	267						
				5,379	267			

Average age of accepted recruits:		
White.....	26 years 11½ months.	
Colored.....	23 years 9½ months.	
Average height of accepted recruits:		
White.....	5 feet 6½ inches.	
Colored.....	5 feet 6¼ inches.	
Total number of enlistments:		
Natives.....	3,827	
Foreigners.....	1,546	
Total.....	5,373	

G.—MILITARY GEOGRAPHICAL DIVISIONS, DEPARTMENTS, AND POSTS,

WITH DISTRIBUTION OF TROOPS, POST-OFFICES, TELEGRAPH STATIONS, AND NEAREST RAILROAD STATIONS OR BOAT LANDINGS.

DIVISIONS.

DIVISION OF THE MISSOURI.

Lt. Gen. P. H. SHERIDAN, comdg.—Hdqrs. Chicago, Ill. Embraces Departments of the Missouri, Dakota, Texas, and the Platte.

DIVISION OF THE ATLANTIC.

Bvt. Maj. Gen. WINFIELD S. HANCOCK, maj. gen., comdg. according to his brevet of maj. gen.—Hdqrs. Governor's Island, New York Harbor. Embraces Departments of the East and the South.

DIVISION OF THE PACIFIC.

Maj. Gen. IRVIN McDOWELL, comdg.—Hdqs. Presidio of San Francisco, Cal.
braces Departments of California, of the Columbia, and of Arizona.

DEPARTMENTS.

DEPARTMENT OF ARIZONA.

Bvt. Maj. Gen. ORLANDO B. WILLCOX, col. 12th Infantry, comdg. according to
brevet of maj. gen.—Hdqs. Whipple Barracks, Prescott, Ariz.

Geographical limits.—Territory of Arizona, and so much of California as lies south
of a line from the northwest corner of Arizona to Point Conception, Cal.

Troops—4th Cavalry; A, 8th Infantry, and 12th Infantry.

DEPARTMENT OF CALIFORNIA.

Maj. Gen. IRVIN McDOWELL, comdg.—Hdqs. Presidio of San Francisco, Cal.
Geographical limits.—State of Nevada, and so much of California as lies north of
the line from the northwest corner of Arizona Territory to Point Conception, Cal.

Troops—C, G, and I, 1st Cavalry; A, B, C, D, E, G, H, L, and M, 4th Artillery;
D, E, F, G, H, I, and K, 8th Infantry.

DEPARTMENT OF THE COLUMBIA.

Brig. Gen. NELSON A. MILES, comdg.—Hdqs. Vancouver Barracks, Wash. T.

Geographical limits.—State of Oregon, and the Territories of Washington, Idaho,
Alaska, excepting so much of Idaho as lies east of a line formed by the extension
of the western boundary of Utah to the northeastern boundary of Idaho embracing
the post of Fort Hall.

Troops—A, B, D, E, F, H, K, L, and M, 1st Cavalry; F and K, 4th Artillery, 2d
21st Infantry.

DEPARTMENT OF DAKOTA.

Bvt. Maj. Gen. ALFRED H. TERRY, brig. gen., comdg. according to his brevet of
gen.—Hdqs. Fort Snelling, Minn.

Geographical limits.—State of Minnesota and Territories of Dakota and Montana.

Troops—2d and 7th Cavalry; 3d, 5th, 7th, 11th, 17th, 18th, and 25th Infantry.

DEPARTMENT OF THE EAST.

Bvt. Maj. Gen. WINFIELD S. HANCOCK, brig. gen., comdg. according to his brevet
maj. gen.—Hdqs. Governor's Island, New York Harbor.

Geographical limits.—The New England States, State of New York excepting the
department and the post of West Point, States of New Jersey, Pennsylvania, De-
laware, Maryland, Virginia, West Virginia, Ohio, Michigan, Wisconsin, Indiana,
the District of Columbia.

Troops—1st Artillery; A, B, C, D, H, I, K, and M, 2d Artillery; 3d Artillery, L,
Artillery, C, 5th Artillery, 10th Infantry.

DEPARTMENT OF THE MISSOURI.

Bvt. Maj. Gen. JOHN PORTER, brig. gen., comdg. according to his brevet of maj. gen.
Hdqs. Fort Leavenworth, Kans.

Geographical limits.—States of Missouri, Kansas, Illinois and Colorado, Territory
New Mexico, Indian Territory, and the posts of Fort Leavenworth and Fort Bascom, T.
including the town of San Elizario, on the Rio Grande and that part of El Paso
County lying south of an east and west line passing immediately south of San
Elizario, on the Rio Grande, and a supply depot at Rawlins Station, Wyo.

Troops—4th and 9th Cavalry; F, 2d Artillery, 13th, 14th, 17th, 19th, 23d, and
Infantry.

DEPARTMENT OF THE PLATTE.

Br. Maj. Gen. GEORGE CROOK, brig. gen., comdg. according to his brevet of maj. gen.—Hdqrs. Omaha, Nebr.

Geographical limits.—States of Iowa and Nebraska; Territories of Utah and Wyoming excepting of the latter the camp on Snake River and supply depot at Rawlins Station, and so much of the Territory of Idaho as lies east of a line formed by the extension of the western boundary of Utah to the northeastern boundary of Idaho, embracing the post of Fort Hall, Idaho.

Troops—3d and 5th Cavalry; 4th, 6th, and 9th Infantry.

DEPARTMENT OF THE SOUTH.

Br. Brig. Gen. HENRY J. HUNT, col. 5th Artillery, comdg. according to his brevet of brig. gen.—Hdqrs. Newport Barracks, Ky.

Geographical limits.—States of North Carolina, South Carolina, Georgia, Florida, Louisiana, Arkansas, Mississippi, Alabama, Kentucky, and Tennessee.

Troops—E, G, and L, 2d Artillery; Hdqrs. A, B, D, E, F, G, H, I, K, L, and M, 5th Artillery.

DEPARTMENT OF TEXAS.

Br. Maj. Gen. C. C. AUGUR, brig. gen., comdg. according to his brevet of maj. gen.—Hdqrs. San Antonio, Tex.

Geographical limits.—State of Texas, excepting the posts of Fort Elliott and Fort Bliss, Tex. and that portion of El Paso County embraced in the Department of the Missouri.

Troops—8th and 10th Cavalry; 1st, 16th, 20th, and 22d Infantry.

DEPARTMENT OF WEST POINT.

Br. Maj. Gen. O. O. HOWARD, brig. gen., comdg. according to his brevet of maj. gen.—Hdqrs. West Point, N. Y.

Geographical limits.—The Military Academy and the post of West Point, N. Y.

Troops—Corps of Cadets; E, Battalion of Engineers; detachments of cavalry and artillery.

NOTE.—Under existing orders the following changes in the distribution of troops will be made after November 1, 1861:

The 1st Artillery (except Battery G), now in the Department of the East, will interchange with the eleven companies of the 4th Artillery, in the Division of the Pacific.

The 3d Artillery (except Battery A), now in the Department of the East, will interchange with the eleven companies of the 5th Artillery, in the Department of the South.

The 1st Infantry, in the Department of the Missouri, will interchange with the 20th Infantry, in the Department of Texas.

POSTS.

[Those not garrisoned are indicated by an *.]

Abraham Lincoln, Fort, Dak. (Dept. Dak.)—P. O. and tel. stn. same; daily conveyance from Bismarck, on N. P. R. R., dist. 4½ m.

Adams Fort, R. I. (Dept. East.)—P. O. and tel. stn. Newport, R. I.; boat from Newport dist. 1½ m.

Angel Island, Cal. (Dept. Cal.)—P. O. same; tel. and R. R. stn. San Francisco, Cal., dist. 4 m.; steamer to post.

Bunker Fort, Mass. (Dept. East.)—P. O. and tel. stn. Plymouth, Mass., dist. 5 m. by water.

Angel Island, Cal. (Dept. Cal.)—P. O. same; tel. and R. R. stn. San Francisco, Cal., dist. 7 m.; steamer to post.

Apache Fort, Ariz. (Dept. Ariz.)—P. O. and tel. stn. same; daily stage from Willcox sta. on S. P. R. R. to Camp Thomas, Ariz.; thence by buckboard once a week to post; dist. from Willcox to post 150 m.

Antelope Fort, Mont. (Dept. Dak.)—P. O. and tel. stn. same; R. R. stn. Dillon, on N. P. R. R., dist. 32½ m.; stubble ldg. (summer) Coal Banks, on Missouri River, dist. 3½ m.; daily conveyance from Dillon to Fort Benton, and tri-weekly thence to post; tri-weekly conveyance from Coal Banks.

- Atlanta, Ga.* (Dept. South.)—P. O., tel. and R. R. stn. same.
- Bad Lands, Cantonment at, Dak.* (Dept. Dak.)—P. O. Comba, Dak.; tel. and R. R. Little Missouri Station, on N. P. R. R., dist. 200 yards.
- Barrancas, Fort, Fla.* (Dept. South.)—P. O. Warrington, Fla.; tel. stn. Port Navy Yard, Fla.; steamer daily from R. R. at Pensacola, Fla., dist. 9 m.
- * *Baton Rouge Barracks, La.* (Dept. South.)—P. O. and tel. stn. Baton Rouge steamer from New Orleans, dist. 130 m.
- Bayard, Fort, N. Mex.* (Dept. Mo.)—P. O. and tel. stn. same; R. R. stn. D. junction of A. T. and S. F. R. R. and S. P. R. R., dist. 45 m.; stage six times a to post.
- Benicia Barracks, Cal.* (Dept. Cal.)—P. O., tel. and R. R. stn. (C. P. R. R.) Ben Cal., dist. 1 m.
- Bennett, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; tri-weekly stage Pierre, Dak., on C. and N. W. R. R., to Fort Sully, 23 m., thence by private conveyance to post, 7 m.
- Bidwell, Fort, Cal.* (Dept. Cal.)—P. O. same; tel. and R. R. stn. Reno, Nev., on R. R., dist. 200 m.; stage to post.
- Bliss, Fort, Tex.* (Dept. Mo.)—P. O., tel. and R. R. stn. El Paso, Tex.; dist. 1 m.
- Boise Barracks, Idaho* (Dept. Columbia).—P. O. and tel. stn. Boise City, Idaho; stage from Kelton, Utah, on C. P. R. R., dist. 245 m.
- Bowie, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; tri-weekly stage from Cochise, Ariz., on S. P. R. R., dist. 27 m.
- Brady, Fort, Mich.* (Dept. East.)—P. O. Sault de St. Marie, Mich.; tel. stn. Mackinac City; boats land at post in summer; sled in winter from Petoskey, on G. R. R., dist. 115 m.
- Bridger, Fort, Wyo.* (Dept. Platte.)—P. O. same; tel. stn. Carter, Wyo.; special conveyance from Carter Station, on U. P. R. R., distance 10 m.
- Brooke, Fort, Fla.* (Dept. South.)—P. O. and tel. stn. Tampa, Fla.; steamer Monday and Thursdays from Cedar Keys, Fla., dist. 170 m., via Manatee.
- Brown, Fort, Tex.* (Dept. Tex.)—P. O. tel. and R. R. stn. Brownsville, Tex.
- Buford, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; stubt. ldg. at post on Souris River, by land from Bismarck, 221 m., by river 303 m.
- Cameron, Fort, Utah* (Dept. Platte.)—P. O. and tel. stn. Beaver City, Utah; stage from Milford, Utah, on U. S. R. R., dist. 37½ m.
- Canby, Fort, Wash. T.* (Dept. Columbia).—P. O. and tel. stn. Astoria, Oreg.; government tug five times a week from Astoria, dist. 14 m.
- * *Carroll, Fort, Md.* (Dept. East.)—P. O. and tel. stn. Baltimore, Md., dist. 8 m. water.
- * *Caswell, Fort, N. C.* (Dept. South.)—P. O. and tel. stn. Smithville, N. C., dist. 22 m. steamer daily from Wilmington to Smithville, dist. 22 m.
- Cheyenne Depot, Wyo.* (Dept. Platte.)—P. O., tel. and R. R. stn. Cheyenne, on U. R., dist. 2 m.
- Clark, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. Brackettville, Tex.; daily stage buckboard from San Antonio, Tex., dist. 135 m.
- * *Clark's Point, Fort at, Mass.* (Dept. East.)—P. O. and tel. stn. New Bedford, private conveyance from New Bedford, dist. 3 m.
- * *Clinch, Fort, Fla.* (Dept. South.)—P. O., tel. and R. R. stn. Fernandina, Fla., 3 m.
- Cœur d'Alene, Fort, Idaho* (Dept. Columbia).—P. O. and tel. stn. same; ambulance from Westwood, Idaho, on N. P. R. R., dist. 9 m.
- Columbus, Fort, N. Y. H.* (Dept. East.)—P. O. and tel. stn. Governor's Island, government steamer from New York City, dist. 1½ m.
- Colville, Fort, Wash. T.* (Dept. Columbia).—P. O. same; tel. and R. R. stn. Spok Falls, Wash. T., on N. P. R. R.; tri-weekly stage or buckboard to post, dist. 3 m.
- Concho, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. same; stage daily from Abilene, Tex., on T. P. R. R., dist. 90 m.
- * *Constitution, Fort, N. H.* (Dept. East.)—P. O. New Castle, N. H.; tel. stn. Portsmouth, N. H.; stage from Portsmouth, dist. 3 m.
- Craig, Fort, N. Mex.* (Dept. Mo.)—P. O. same; tel. and R. R. stn. San Marcial, T. and S. F. R. R.; private conveyance to post, dist. 5 m.
- Cummings, Fort, N. Mex.* (Dept. Mo.)—P. O. and tel. stn. same; government transportation from Porter Station, on A. T. and S. F. R. R., dist. 4½ m.
- Custer, Fort, Mont.* (Dept. Dak.)—P. O. and tel. stn. same; tri-weekly stage Glendive, terminus of N. P. R. R., dist. 172 m.; stubt. to Terry's Landing, on Yellowstone (summer), dist. 30 m.
- D. J. Russell, Fort, Wyo.* (Dept. Platte.)—P. O., tel. and R. R. stn. Cheyenne, P. R. R., dist. 3 m.
- Davis, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. same; stage daily from terminus of S. P. R. R., dist. 180 m.

- Delaware, Fort, Del.** (Dept. East.)—P. O. and tel. stn. Delaware City, Del.; steamer daily from Philadelphia to Delaware City, dist 14 m. from post; stage daily from Kirkwood, on P. W. and B. R. R., dist 8 m.
- Dodge Fort, Kans.** (Dept. Mo.)—P. O. same; tel. and R. R. stn. Dodge City, Kans., on A. T. and S. F. R. R.; special conveyance to post 5 m.
- Douglas Fort, Utah** (Dept. Platte.)—P. O., tel. and R. R. stn. Salt Lake City, Utah, dist 2 m.
- Drum Barracks, Tex.** (Dept. Tex.)—P. O. and tel. stn. Eagle Pass, Tex.; stage daily from Sabinal, on G. H. and S. R. R., dist 25 m.
- Dutch Island, Fort on, R. I.** (Dept. East.)—P. O. Jamestown, R. I.; tel. stn. Newport, R. I.; special conveyance from Newport, dist 5 m.
- Ediot Fort, Tex.** (Dept. Mo.)—P. O. Melinda, Tex.; tel. stn. at post; daily stage or buckboard from Dodge City, Kans., on A. T. and S. F. R. R., dist 179 m.
- Ellis Fort, Mont.** (Dept. Dak.)—P. O. and tel. stn. same; daily stage from Dillon, on P. N. R. R., to Bozenan, 3 m. from post.
- Feltherman Fort, Wyo.** (Dept. Platte.)—P. O. and tel. stn. same; daily stage (summer) and buckboard (winter) from Rock Creek, Wyo., on U. P. R. R., dist 83 m.
- Finn's Point, Battery at, N. J.** (Dept. East.)—P. O. and tel. stn. Salem, N. J., dist 6 m.
- Foot Fort, Md.** (Dept. East.)—P. O. same; tel. stn. Alexandria, Va.; steamer from Washington, D. C., dist 9 m.
- Fort Point, Cal.** (Dept. Cal.)—P. O., tel. and R. R. stn. San Francisco, Cal., dist 5 m.
- Frederick Fort, Wyo.** (Dept. Platte.)—P. O., tel. and R. R. stn. same.
- Gaines Fort, Ala.** (Dept. South.)—P. O., tel. and R. R. stn. Mobile, Ala.; boat once a month from Mobile, dist 30 m.
- Garrison, Fort Colo.** (Dept. Mo.)—P. O., tel. and R. R. stn. (D. and R. G. R. R.) same.
- Gaston, Fort, Cal.** (Dept. Cal.)—P. O. Hoopa Valley, Cal.; tel. stn. Arcata, Cal.; boat daily from Eureka to Arcata, dist 6 m., or by road 12 m.; thence by special transportation, dist 40 m.
- Gibson, Fort, Ind.** (Dept. Mo.)—P. O. and tel. stn. same; special conveyance from Gibson Station, M. K. and T. R. R., dist 7 m.
- Georges Fort, Me.** (Dept. East.)—P. O. and tel. stn. Portland, Me., dist 2 m.
- Grant Fort, Ariz.** (Dept. Ariz.)—P. O. and tel. stn. same; tri weekly buckboard from Wickenburg, on S. P. R. R., dist 27 m.
- Gratiot, Fort, Mich.** (Dept. East.)—P. O. Gratiot, Mich.; tel. and R. R. stn. (Grand Trunk Depot) adjoint post.
- Greenold, Fort, Conn.** (Dept. East.)—P. O. Groton, Conn.; tel. stn. New London, Conn.; ferry from New London, dist 1 m.
- Hale Fort, Dak.** (Dept. Dak.)—P. O. same; tel. stn. Crow Creek Agency, Dak.; stage from Chamberlain, on C. M. and S. P. R. R., dist 16 m.
- Hall Fort, Idaho** (Dept. Platte.)—P. O. and tel. stn. Blackfoot, Idaho; Blackfoot station on U. N. R. R., dist 84 m.
- Halleck Fort, Nev.** (Dept. Cal.)—P. O. same; tel. and R. R. stn. Halleck Station, on P. R. R., dist 12 m.; buckboard daily to post.
- Hamilton, Fort, N. Y.** (Dept. East.)—P. O. and tel. stn. same; city railroad from Brooklyn, dist 6 m.
- Hays Fort, Kans.** (Dept. Mo.)—P. O., tel. and R. R. stn. (K. P. R. R.) Hays City, Kans.
- Hickman, Camp Ariz.** (Dept. Ariz.)—P. O. same; tel. stn. Charleston, Ariz.; stage daily from Benson, on S. P. R. R., dist 47 m.
- Independence, Fort, Mass.** (Dept. East.)—P. O. and tel. stn. Boston, Mass.; government tug from Boston, dist 3 m.
- Jackson Barracks, La.** (Dept. South.)—P. O., tel. and R. R. stn. New Orleans, La.
- Jackson, Fort, Ga.** (Dept. South.)—P. O., tel. and R. R. stn. Savannah, Ga., dist 4 m.
- Jackson Fort, La.** (Dept. South.)—P. O. "The Forts," La.; tel. stn. Quarantine, La.; steamer tri weekly from New Orleans, dist 73 m.
- Jefferson, Fort, Fla.** (Dept. South.)—P. O. and tel. stn. Key West, Fla.; boat from Key West, dist 71 m.
- Johnson Fort, N. C.** (Dept. South.)—P. O. and tel. stn. Smithville, N. C.; steamer daily from Wilmington, N. C., dist 22 m.
- Joseph Fort, Mont.** (Dept. Dak.)—P. O. and tel. stn. same; daily stage from Glendive, on N. P. R. R. to Miles City, Mont., 2 m. from post; dist. from Glendive to post 90 m.
- Key West Barracks, Fla.** (Dept. South.)—P. O., tel. and boat ldg. Key West, Fla.
- Klamath Fort, Oreg.** (Dept. Columbia.)—P. O. same; tel. stn. Ashland, Oreg.; stage from Roseburg, Cal., on C. P. R. R., dist 261 m.; and from Roseburg, Oreg., on O. A. & N. R. R., dist 214 m.
- Knox Fort, Me.** (Dept. East.)—P. O. and tel. stn. Bucksport, Me.; ferry from Bucksport, dist 4 m.
- Lafayette Fort, N. Y. H.** (Dept. East.)—P. O. and tel. stn. Fort Hamilton, N. Y.; city rail; and from Brooklyn, dist 6 m.
- Lapeer Fort, Idaho** (Dept. Columbia.)—P. O. and tel. stn. same; special conveyance from Lewiston, Idaho, dist 12 m.

REPORT OF THE SECRETARY OF WAR.

- Laramie, Fort, Wyo.* (Dept. Platte.)—P. O. and tel. stn. same; stage from Cheyenne on U. P. R. R., dist. 88 m.
- Leavenworth, Fort, Kans.* (Dept. Mo.)—P. O., tel. and R. R. stn. (M. P. R. R., and I. R. R.) same.
- Leavenworth Military Prison, Kans.* (Dept. Mo.)—P. O., tel. and R. R. stn. same as Leavenworth.
- Lewis, Fort, Colo.* (Dept. Mo.)—P. O. same; tel. and R. R. stn. Chama Station, N. on D. and R. G. R. R.; stage daily to post, dist. 114 m.
- Little Rock Barracks, Ark.* (Dept. South.)—P. O., tel. and R. R. stn. Little Rock, Ark.
- * *Livingston, Fort, La.* (Dept. South.)—P. O. Grand Isle, La.; tel. stn. New Orleans, La.; steamer tri-weekly from New Orleans, dist. 95 m.
- Louell, Fort, Ariz.* (Dept. Ariz.)—P. O. Tucson, Ariz.; tel. stn. at post; special conveyance from Tucson, on S. P. R. R., dist. 7 m.
- Lyon, Fort, Colo.* (Dept. Mo.)—P. O. same; tel. and R. R. stn. Las Animas, on A. and S. F. R. R., dist. 1 m.
- Mackinac, Fort, Mich.* (Dept. East.)—P. O. Mackinac, Mich.; tel. stn. Mackinaw, Mich.; steamer (summer) from Petoskey, on G. R. and I. R. R., dist. 56 m.; (winter) from same point to Cheboygan, thence special conveyance.
- * *Macomb, Fort, La.* (Dept. South.)—P. O., tel. and R. R. stn. Chef Menteur, La., dist. 1½ m.
- * *Macon, Fort, N. C.* (Dept. South.)—P. O. Beaufort, N. C.; tel. stn. at post; boat R. R. at Morehead City, N. C., dist. 2 m.
- Madison Barracks, N. Y.* (Dept. East.)—P. O., tel. and R. R. stn. Sackett's Harbor, N. Y.
- Maginnis, Fort, Mont.* (Dept. Dak.)—P. O. Parker, Mont., tel. stn. Benton, Mont.; stnbt. (summer) to Rocky Point, Mont. (Missouri River), 63 m. from post; from terminus of U. N. R. R., dist. 278 m.
- Marcy, Fort, N. Mex.* (Dept. Mo.)—P. O., tel. and R. R. stn. (A., T. and S. F. R. Santa Fé, N. Mex.
- * *Marion, Fort, Fla.* (Dept. South.)—P. O. and tel. stn. St. Augustine, Fla.
- * *McClary, Fort, Me.* (Dept. East.)—P. O. Kittery Point, Me.; tel. stn. Portsmouth, H., stage twice a day from Portsmouth, dist. 4½ m.
- McDermut, Fort, Ner.* (Dept. Cal.)—P. O. and tel. stn. same; stage daily from W. on C. P. R. R., dist. 78 m.
- McDowell, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; stage from Maricopa, Ariz., on S. P. R. R., via Phoenix, dist. 58 m.; government transportation via M. dist. 48 m.
- McHenry, Fort, Md.* (Dept. East.)—P. O. and R. R. stn. Baltimore, Md.; tel. stn. at post.
- McIntosh, Fort, Tex.* (Dept. Tex.)—P. O., tel. and R. R. stn. Laredo, Tex.; dist. 1 m.
- McKacott, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. same; stage from Abilene, Tex., on T. P. R. R.; dist. 1¼ m.
- McKamey, Fort, Wyo.* (Dept. Platte.)—P. O. and tel. stn. same; stage or buckboard from Rock Creek, on U. P. R. R., dist. 226 m.
- Meade, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; daily stage from Ft. Dak., on C. and N. W. R. R., dist. 180 m.; from Sidney, Nebr., on U. P. R. R., dist. 200 m.
- * *Mifflin, Fort, Pa.* (Dept. East.)—P. O. and tel. stn. Philadelphia, Pa.; special conveyance from Paschall, on P., W. and B. R. R., dist. 5 m., or by Delaware River to Philadelphia, dist. 7 m.
- Mission, Fort, Mont.* (Dept. Dak.)—P. O. and tel. stn. same; stage from Lovell, U. N. R. R., dist. 235 m.; from stnbt. ldg., Benton, Mont., dist. 276 m.
- Mojave, Fort, Ariz.* (Dept. Ariz.)—P. O. Mojave City, Ariz.; tel. stn. Prescott, Ariz.; weekly buckboard from Prescott, Ariz., dist. 165 m., steamer monthly from Yuma on Colorado River.
- Monroe, Fort, La.* (Dept. East.)—P. O. and tel. stn. same; steamboats daily from Baltimore, Washington, Norfolk, and New York.
- * *Montgomery, Fort, N. Y.* (Dept. East.)—P. O., tel. and R. R. stn. (O. and L. C. R. Rouse's Point, N. Y., dist. 2 m.
- * *Morgan, Fort, Ala.* (Dept. South.)—P. O. Herndon, Ala.; tel. stn. Mobile, Ala.; stage tri-weekly from Mobile, dist. 30 m.
- * *Moultrie, Fort, S. C.* (Dept. South.)—P. O. Moultrieville, S. C.; tel. and R. R. Charleston, S. C., dist. 5 m.
- * *Mount Vernon Barracks, Ala.* (Dept. South.)—P. O. Mount Vernon, Ala.; tel. stn. Mobile, Ala.; Fort Stoddard ldg., on Mobile River, dist. 3 m.
- Muir, Fort, Va.*—P. O. and R. R. stn. Washington, D. C.; tel. stn. at post.
- Newport Barracks, Ky.* (Dept. South.)—P. O., tel. and R. R. stn. Newport, Ky.
- Niagara, Fort, N. Y.* (Dept. East.)—P. O. Youngstown, N. Y.; tel. stn. Lewiston, N. Y.; stage from Lewiston, dist. 7 m.

- Omaha, Fort, Nebr.** (Dept. Platte.)—P. O. same; tel. stn. O'Neil City, Nebr.; stage for O'Neil City, on S. C. and P. R. R., dist. 113 m.
- North Fork of Canadian River, Cantonment on, Ind. T.** (Dept. Mo.)—P. O. and tel. stn. same; bi-weekly stage and buckboard from Caldwell, Kans., on Caldwell branch of A., T. and S. F. R. R., dist. 92½ m.
- Oglethorpe Barracks, Ga.** (Dept. South.)—P. O., tel. and R. R. stn. Savannah, Ga.
- Omaha, Fort, Nebr.** (Dept. Platte.)—P. O. Omaha, Nebr.; tel. stn. at post; R. R. stn. Omaha dist. 4 m.
- Ontario, Fort, N. Y.** (Dept. East.)—P. O., tel. and R. R. stn. Oswego, N. Y.
- Pembina, Fort, Dak.** (Dept. Dak.)—P. O. and tel. stn. Pembina, Dak.; St. Vincent, on St. P., M. and M. R. R., dist. 3 m.
- Pharm Fort, Mass.** (Dept. East.)—P. O. and tel. stn. Fairhaven, Mass.
- Pickens, Fort, Fla.** (Dept. South.)—P. O. Warrington, Fla.; tel. stn. Pensacola Navy Yard; steamer daily from R. R. at Pensacola, Fla., dist. 10 m.
- Pike Fort, La.** (Dept. South.)—P. O. same; tel. stn. Miller's Bayou, La.; boat daily from Lake Catherine Station, on N. O. and M. R. R., dist. 7 m.; steamer tri-weekly from New Orleans, dist. 28 m.
- Plattsburg Barracks, N. Y.** (Dept. East.)—P. O., tel. and R. R. stn. Plattsburg, N. Y.
- Point San Jose, Cal.** (Dept. Cal.)—P. O. same; tel. stn. Presidio of San Francisco; R. R. stn. San Francisco, Cal., dist. 2 m.
- Popham, Fort, Me.** (Dept. East.)—P. O. Hunnewell's Point, Me.; tel. stn. Bath, Me.; stage; water from Bath, Me.; dist. 12 m. by water, 15 m. by land.
- Poplar River Camp, Mont.** (Dept. Dak.)—P. O. Poplar Creek Agency, Mont.; tel. stn. at post, stubt. ldg. (summer) at Poplar Creek Agency, dist. 14 m.
- Porter Camp, Mont.** (Dept. Dak.)—P. O. Glendive, Mont.; tel. stn. at post; stubt. ldg. (summer) dist. 1 m.; R. R. stn. Glendive, adjacent to post.
- Porter Fort, N. Y.** (Dept. East.)—P. O., tel. and R. R. stn. Buffalo, N. Y.
- Portland Fort, Me.** (Dept. East.)—P. O. and tel. stn. Portland, Me.; special conveyance, by land or water, from Portland, dist. 24 m.
- Presidio of San Francisco, Cal.** (Dept. Cal.)—P. O. and R. R. stn. San Francisco, Cal.; dist. 4½ m.; tel. stn. at division headquarters; city railway from San Francisco to near post.
- Palmetto, Fort, Fla.** (Dept. South.)—P. O. and R. R. stn. Savannah, Ga., dist. 14 m.; tel. stn. Tybee Island, Ga.
- Springfield Fort, Dak.** (Dept. Dak.)—P. O. same; tel. stn. Springfield, Dak.; stage from Springfield, dist. 45 m.; boat from Yauketon (summer), dist. 96 m.
- Reno Fort, Ind. T.** (Dept. Mo.)—P. O. and tel. stn. same; daily stage and buckboard from Caldwell, Kans., on Caldwell Branch A., T. and S. F. R. R., dist. 109 m.
- Riley Fort, Kans.** (Dept. Mo.)—P. O. and R. R. stn. (K. P. R. R.) same; tel. stn. Junction City, Kans.
- Rio Grande Fort, Tex.** (Dept. Tex.)—P. O. Rio Grande City, Tex.; tel. stn. at post; conveyance from R. R. stn., Brownsville, Tex., dist. 120 m.; stage from Pena, on T. M. R. R., dist. 45 m.
- Robinson, Fort, Nebr.** (Dept. Platte.)—P. O. and tel. stn. same; stage from Sidney, on U. P. R. R., dist. 120 m.
- San Antonio, Tex.** (Dept. Tex.)—P. O., tel. and R. R. stn. same.
- Sandwich Fort, Wyo.** (Dept. Platte.)—P. O. Laramie City, Wyo.; tel. and R. R. stn. U. P. R. R. at post.
- San Diego Barracks, Cal.** (Dept. Ariz.)—P. O., tel. stn. and boat ldg. San Diego, Cal.
- Sandy Hook, Fort at, N. J.** (Dept. East.)—P. O., tel. and R. R. stn. and stubt. ldg. Sandy Hook, N. J., dist. 2 m.
- Seammel Fort, Me.** (Dept. East.)—P. O., tel. and R. R. stn. Portland, Me., dist. 2 m.
- Schooley Fort, N. Y.** (Dept. East.)—P. O., tel. and R. R. stn. Westchester, N. Y., dist. 34 m.
- Selden, Fort, N. Mex.** (Dept. Mo.)—P. O. and tel. stn. same; R. R. stn. at post (A., T. and S. F. R. R.)
- Senall, Fort, Mass.** (Dept. East.)—P. O., tel. and R. R. stn. Marblehead, Mass., dist. 14 m.
- Shaw Fort, Mont.** (Dept. Dak.)—P. O. and tel. stn. same; stage from Dillon on U. N. R. R., dist. 300 m.; and from stubt. ldg., Benton, Mont., dist. 60 m.
- Shesha Island, Miss.** (Dept. South.)—P. O., tel. and R. R. stn. (N. O. and M. R. R. R.)
- Silcox, Miss.**, dist. 15 m.; special boat to post.
- Sidney Fort, Nebr.** (Dept. Platte.)—P. O., tel. and R. R. stn. Sidney, Nebr., on U. P. R. R.
- St. Louis, Fort, Ind. T.** (Dept. Mo.)—P. O. and tel. stn. same; stage and buckboard daily from Caldwell, Kans., dist. 140 m.; from Caddo, Ind. T., tri-weekly, dist. 100 m.
- Webster, Fort, Dak.** (Dept. Dak.)—P. O. same; tel. stn. Webster, Dak.; tri-weekly conveyance from Brown's Valley, Minn., dist. 40 m.; weekly from Webster, Dak. on H. and D. R. R., dist. 23½ m.
- Wheeler River, Camp on, Wyo.** (Dept. Mo.)—P. O. same; tel. stn. Rawlins, Wyo.; stage or buckboard daily from Rawlins, on U. P. R. R., dist. 65 m.

- Snelling, Fort, Minn.* (Dept. Dak.)—P. O., tel. and R. R. stn. same.
- Spokane, Camp, Wash. T.* (Dept. Columbia.)—P. O. and tel. stn. Spokane Falls, Wash. T.; special conveyance from Sprague 56 m., Cheney 58 m., and Spokane Falls 63 m. on N. P. R. R.
- Standish, Fort, Mass.* (Dept. East.)—P. O., tel. and R. R. stn. Plymouth, Mass., dist. 1 m. by water.
- Stanton, Fort, N. Mex.* (Dept. Mo.)—P. O. same; tel. stn. Socorro, N. Mex.; tri-weekly buckboard from Las Vegas, N. Mex., dist. 180 m.
- St. Augustine, Fla.* (Dept. South.)—P. O., tel. and R. R. stn. same.
- Stevens, Fort, Oreg.* (Dept. Columbia.)—P. O. and tel. stn. Astoria, Oreg.; government tug four times a week from Astoria, dist. 7 m.
- Stevenson, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; stmbt (summer) from Bismarck, on N. P. R. R., dist. 84 m.; tri-weekly stage from same, 71 m.
- Stockton, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. same; daily stage from Pecos City on T. and P. R. R., dist. 55 m.
- St. Philip, Fort, La.* (Dept. South.)—P. O. "The Forts," La.; tel. stn. Quarantine La.; steamer bi-weekly from New Orleans, dist. 73 m.
- Sulthan, Fort, Me.* (Dept. East.)—P. O. and tel. stn. Eastport, Me.; stmbt ldg 4 m. from post; R. R. stn. Calais, Me., dist. 29 m.
- Sully, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; tri-weekly stage from Pierre Dak., on C. and N. W. R. R., dist. 24½ m.; stmbt from Bismarck, dist. 25½ m.; by land 190 m.
- Sumter, Fort, S. C.* (Dept. South.)—P. O. Moultrieville, S. C.; tel. and R. R. stn. Charleston, S. C., dist. 5 m.
- Supply, Fort, Ind. T.* (Dept. Mo.)—P. O. and tel. stn. same; daily stage from Dodge City, Kans., on A. T. and S. F. R. R., dist. 86 m.
- Taylor, Fort, Fla.* (Dept. South.)—P. O., tel. stn., and boat ldg. Key West, Fla.
- Thomas, Camp, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; stage and buckboard from Wilcox, on S. P. R. R., dist. 65 m.
- Thornburgh, Fort, Utah* (Dept. Platte.)—P. O. via Park City, Utah.
- Totten, Fort, Dak.* (Dept. Dak.)—P. O. same; tel. stn. Jamestown, Dak.; semi-weekly stage from Jamestown, Dak., on N. P. R. R., dist. 81 m.
- Townsend, Fort, Wash. T.* (Dept. Columbia.)—P. O. Port Townsend, Wash. T.; tel. stn. at post; special conveyance from Port Townsend, dist. 3 m.
- Trumbull, Fort, Conn.* (Dept. East.)—P. O., tel. and R. R. stn. New London, Conn., dist. 1 m.
- Uacompahgre, Cantonment on, Colo.* (Dept. Mo.)—P. O. and tel. stn. same; stage from Gunnison City, Colo., on D. and R. G. R. R., dist. 79 m.
- Union, Fort, N. Mex.* (Dept. Mo.) to P. O. same; tel. and R. R. stn. Watrous, N. Mex., dist. 9 m.
- Vancouver Barracks, Wash. T.* (Dept. Columbia.)—P. O., tel. stn. and boat ldg. Vancouver, Wash. T.; boat from Portland, Oreg., four times daily, except Sunday.
- Verde, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; stage from Maricopa, on P. R. R., dist. 140 m.
- Wadsworth, Fort, N. Y.* (Dept. East.)—P. O. Stapleton, N. Y.; tel. stn. Quarantine, Clifton, Staten Island, N. Y.
- Wallace, Fort, Kans.* (Dept. Mo.)—P. O. same; tel. and R. R. stn. Wallace, Kans., on P. R. R., dist. 2 m.
- Walla Walla, Fort, Wash. T.* (Dept. Columbia.)—P. O., tel. and R. R. stn. (W. W. and C. R. R. R.) Walla-Walla, Wash. T.
- Warren, Fort, Mass.* (Dept. East.)—P. O. and tel. stn. Boston, Mass.; steamer from Boston, dist. 7 m.
- Washakie, Fort, Wyo.* (Dept. Platte.)—P. O. same; tel. stn. Rawlins, Wyo.; daily stage from Green River Station, on U. P. R. R., dist. 147 m.
- Washington Barracks, D. C.* (Dept. East.)—P. O., tel. and R. R. stn. Washington, D. C.
- Washington, Fort, Md.* (Dept. East.)—P. O. same; tel. stn. Alexandria, Va.; stmbt from Washington D. C. dist. 13 m.
- Wayne, Fort, Mich.* (Dept. East.)—P. O. and tel. stn. Detroit, Mich.; city railway from Detroit dist. 3 m.
- Whipple Barracks, Ariz.* (Dept. Ariz.)—P. O. Prescott, Ariz.; tel. stn. at post; stage daily from Maricopa on S. P. R. R., dist. 126 m.
- White Horse, Camp on, Colo.* (Dept. Mo.)—P. O. Meeker, Colo.; tel. stn. Rawlins, Wyo.; daily stage from Rawlins, Wyo., on U. P. R. R., dist. 145 m.
- Wingate, Fort, N. Mex.* (Dept. Mo.)—P. O. same; tel. and R. R. stn. Wingate dist. 3 m.
- Winthrop, Fort, Mass.* (Dept. East.)—P. O. and tel. stn. Boston, Mass.; stmbt from Boston, dist. 2 m.
- Walcott, Fort, R. I.*—P. O. tel. and R. R. stn. Newport, R. I.
- Wood, Fort, N. Y. H.*—P. O., tel. and R. R. stn. New York City, dist. 3 m.
- Yates, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; stage (60 m.) and stmbt. (6 m.) from Bismarck, Dak., on N. P. R. R.
- Yuma, Fort, Cal.* (Dept. Ariz.)—P. O., tel. and R. R. stn. and boat ldg. Yuma, Ariz.

ARMORIES, ARSENALS, AND RECRUITING AND ENGINEER DEPOTS.

ARMORIES AND ARSENALS.

Pittsburgh Arsenal, Pa.—P. O., tel. and R. R. stn. Pittsburgh, Pa.
Augusta Arsenal, Ga.—P. O., tel. and R. R. stn. Augusta, Ga., dist. 3 m.
Benicia Arsenal, Cal.—P. O., tel. and R. R. stn. Benicia, Cal., dist. 1 m.
Fort Monroe Arsenal, Va.—P. O., and tel. stn. Fort Monroe, Va.; stubbs, daily from New York, Baltimore, Washington, and Norfolk.
Fort Union Arsenal, N. Mex.—P. O. Fort Union, N. Mex.; tel. and R. R. stn. Watrous, N. Mex. on A., T. and S. F. R. R., dist. 8 m.
Frankford Arsenal, Pa.—P. O., and tel. stn. Philadelphia, Pa.; Bridesburg, on P. R. R., dist. 4 m.
Indianapolis Arsenal, Ind.—P. O., tel. and R. R. stn. Indianapolis, Ind.
Augusta Arsenal, Me.—P. O., tel. and R. R. stn. Augusta, Me.
New York Arsenal, N. Y.—P. O. and tel. stn. Governor's Island, N. Y.; government steamer from New York City, dist. 1½ m.
Rock Island Arsenal, Ill.—P. O., and tel. stn. Rock Island, Ill.; special conveyance from R. R. stn. and boat ldfs. in Rock Island, Ill., and Davenport, Iowa, dist. 2 m.
St. Louis Powder Depot, Mo.—P. O., tel. and R. R. stn. Jefferson Barracks, Mo.
San Antonio Arsenal, Tex.—P. O., tel. and R. R. stn. San Antonio, Tex.
Springfield Armory, Mass.—P. O., tel. and R. R. stn. Springfield, Mass.
Vancouver Arsenal, Wash. T.—P. O., and tel. stn. Vancouver, Wash. T.
Watertown Arsenal, Mass.—P. O., tel. and R. R. stn. Watertown, Mass.
West Troy Arsenal, N. Y.—P. O., and tel. stn. West Troy, N. Y., R. R. stn. East Troy, N. Y., dist. 1½ m.

RECRUITING DEPOTS.

Jefferson Barracks, Mo.—P. O., tel. and R. R. stn. same; Col. T. H. Neill, major, comdg.
Peikham Island, N. Y.—P. O. Peikham, N. Y.; tel. stn. New Rochelle, N. Y.; stage and boat from New Rochelle, on N. H. R. R., dist. 2 m., or from Grand Central Depot, N. Y. City, dist. 19 m.; Lieut. Col. H. M. Black, 18 inf., comdg.
Columbus Barracks, Ohio.—P. O., tel. and R. R. stn. Columbus, Ohio; Lieut. Col. William P. Carhu, 17 inf., comdg.

ENGINEER DEPOT.

Wet's Point, N. Y.—P. O., tel. and R. R. stn. Whitestone, N. Y., dist. 2½ m.

HEADQUARTERS OF REGIMENTS.

CAVALRY.

Fort Walla-Walla, Wash. T.	6 Fort Lowell, Ariz.
Fort Custer, Mont.	7 Fort A. Lincoln, Dak.
Fort D. A. Russell, Wyo.	8 Fort Clark, Tex.
Fort Riley, Kans.	9 Santa Fé, N. Mex.
Fort Laramie, Wyo.	10 Fort Concho, Tex.

ARTILLERY.

Fort Adams, R. I.	3 Fort Hamilton, N. Y.
Washington Barracks, Washington, D. C.	4 Presidio, San Francisco, Cal.
	5 Atlanta, Ga.

INFANTRY.

Fort Davis, Tex.	14 Camp on White River, Colo.
Fort Cœur d'Alene, Idaho	15 Fort Lewis, Colo.
Fort Shaw, Mont.	16 Fort McKavett, Tex.
Fort Sanders, Wyo.	17 Fort Yates, Dak.
Fort Keogh, Mont.	18 Fort Assiniboine, Mont.
Fort Douglas, Utah.	19 Fort Leavenworth, Kans.
Fort Snelling, Minn.	20 Fort Brown, Tex.
Angel Island, Cal.	21 Vancouver Barracks, Wash. T.
Fort Omaha, Nebr.	22 Fort Clark, Tex.
Fort Wayne, Mich.	23 Fort Union, N. M.
Fort Sully, Dak.	24 Fort Supply, Ind. T.
Whipple Barracks, Ariz.	25 Fort Randall, Dak.
Fort Wingate, N. Mex.	

ADJUTANT GENERAL'S OFFICE.

Washington, D. C., October 21, 1881.

H.—Statement of casualties in U. S. Army during fiscal year ending June 30, 1881.

Organization	Expiration of service.	Discharged					Total discharged.	Died.
		Disability	Sentence of gen court-martial	Civil authority	Minority	By order		
Divisions and departments	39					47	86	2
Engineers	33	2				4	34	
Ordnance	72	7	4			26	109	3
First Cavalry	101	29	15		4	4	153	2
Second Cavalry	101	20	15		4	10	150	4
Third Cavalry	89	14	23	1	6	12	145	4
Fourth Cavalry	83	32	24	1	5	2	147	6
Fifth Cavalry	146	15	18		2	10	191	8
Sixth Cavalry	138	32	21		2	13	206	8
Seventh Cavalry	142	38	12		5	13	209	4
Eighth Cavalry	176	29	22		1	12	240	6
Ninth Cavalry	57	43	25	3	5	4	138	15
Tenth Cavalry	68	17	16		1	13	115	20
First Artillery	129	9	8			8	152	2
Second Artillery	127	13	9		1	6	156	10
Third Artillery	101	22	10		2	7	142	2
Fourth Artillery	83	12	5		1	12	123	4
Fifth Artillery	76	28	14		3	11	132	5
First Infantry	44	28	8		4	8	92	9
Second Infantry	63	24	8	2	1	6	104	3
Third Infantry	51	16	7		3	7	84	3
Fourth Infantry	137	10	6		1	10	164	5
Fifth Infantry	88	13	4		4	8	117	3
Sixth Infantry	102	18	15			7	142	2
Seventh Infantry	51	20	6		5	17	95	4
Eighth Infantry	100	18	3			14	143	4
Ninth Infantry	80	16	11		2	1	110	
Tenth Infantry	63	15	6	1	2	3	91	5
Eleventh Infantry	114	18	5	2	1	9	144	3
Twelfth Infantry	79	30	5		3	6	132	3
Thirteenth Infantry	87	8	9		4	10	118	4
Fourteenth Infantry	93	10	17		2	5	127	4
Fifteenth Infantry	99	12	5	1	2	8	127	0
Sixteenth Infantry	44	10	7			12	73	6
Seventeenth Infantry	173	6	10		1	3	193	1
Eighteenth Infantry	74	24	3		4	9	114	2
Nineteenth Infantry	58	22	12		3	7	102	4
Twentieth Infantry	70	7	14		1	1	98	4
Twenty-first Infantry	69	21	10		2	8	110	3
Twenty-second Infantry	156	4	0		1	2	163	4
Twenty-third Infantry	108	10	17		9	2	216	3
Twenty-fourth Infantry	181	8	5			3	197	8
Twenty-fifth Infantry	140	7	6			3	156	7
Signal Corps	49	2	1			62	114	2
General Service (infantry)	36	100	8	2	17	71	228	6
General Service (mounted)	8	41	21	3	9	3	85	9
General Service (California)								1
Detachments—								
West Point	38	4	1			4	47	1
Fort Leavenworth, Kansas	10	5				8	23	1
Washington	37					43	80	4
General non-commissioned staff	114	4	2			18	138	15
Total	4,465	896	478	16	123	586	6,504	248

RECAPITULATION.

Discharges	6,564
Deaths	248
Desertions	2,341
Total	9,153

—Statement showing the number of trials of enlisted men by general courts-martial during the fiscal year ending June 30, 1881, as far as the same have been received.

Organization.	No.	Organization	No.
Engineer Battalion	4	Ninth Infantry	25
Hospital Stewards	5	Tenth Infantry	32
Quartermaster Sergeants	1	Eleventh Infantry	24
First Cavalry	62	Twelfth Infantry	30
Second Cavalry	41	Thirteenth Infantry	24
Third Cavalry	61	Fourteenth Infantry	63
Fourth Cavalry	61	Fifteenth Infantry	20
Fifth Cavalry	62	Sixteenth Infantry	19
Sixth Cavalry	75	Seventeenth Infantry	28
Seventh Cavalry	59	Eighteenth Infantry	20
Eighth Cavalry	65	Nineteenth Infantry	35
Ninth Cavalry	78	Twentieth Infantry	63
Tenth Cavalry	40	Twenty-first Infantry	38
First Artillery	28	Twenty-second Infantry	24
Second Artillery	33	Twenty-third Infantry	34
Third Artillery	46	Twenty-fourth Infantry	15
Fourth Artillery	57	Twenty-fifth Infantry	14
Fifth Artillery	32	Signal Service	16
Sixth Infantry	35	General Service	42
Seventh Infantry	17	Mounted Service	40
Eighth Infantry	24	Detachments—	
Ninth Infantry	35	West Point	12
Tenth Infantry	20	Fort Leavenworth	5
Eleventh Infantry	32	Ordnance	11
Twelfth Infantry	50	Total	1,092

—Statement of assignment of recruits and of re-enlistments during the fiscal year ending June 30, 1881.

Organization	Number of recruits assigned	Re-enlistments.		
		Non-commissioned officers	Privates &c	Privates.
Military divisions and departments	3	2	1	13
Adjutant	3	4	1	27
Finance	173	27	1	30
First Cavalry	110	3	1	18
Second Cavalry	88	7	1	6
Third Cavalry	170	11	1	7
Fourth Cavalry	128	10	1	10
Fifth Cavalry	168	6	1	8
Sixth Cavalry	115	8	2	18
Seventh Cavalry	159	9	4	16
Eighth Cavalry	177	2	4	11
Ninth Cavalry	92	7	1	5
Tenth Cavalry	28	17	1	58
First Artillery	15	17	2	50
Second Artillery	74	14	5	57
Third Artillery	28	14	1	26
Fourth Artillery	40	7	3	17
First Infantry	148	7	3	4
Second Infantry	90	6	2	12
Third Infantry	94	6	1	7
Fourth Infantry	31	13	1	21
Fifth Infantry	161	3	1	6
Sixth Infantry	96	5	1	7
Seventh Infantry	138	2	1	18
Eighth Infantry	11	13	1	29
Ninth Infantry	21	7	2	11
Tenth Infantry	24	9	1	12
Eleventh Infantry	22	6	3	15
Twelfth Infantry	76	5	1	14
Thirteenth Infantry	99	6	1	6
Fourteenth Infantry	99	11	4	10
Fifteenth Infantry	109	1	1	11
Sixteenth Infantry	70	5	1	7
Seventeenth Infantry	80	15	1	24

K.—Statement of assignment of recruits, &c.—Continued.

Organization.	Number of recruits assigned	Re-enlistments	
		Non-commissioned officers	Musicians, &c
Eighteenth Infantry	117	5	.....
Nineteenth Infantry	99	4	.....
Twentieth Infantry	107	7	1
Twenty first Infantry	24	6	.....
Twenty second Infantry	114	8	1
Twenty third Infantry	151	13	1
Twenty fourth Infantry	38	24	1
Twenty fifth Infantry	71	9	2
Signal Corps .....	.....	6	.....
General Service .....	.....	.....	.....
General Service (California) .....	.....	.....	.....
Mounted Service .....	.....	.....	.....
Detachments -	.....	.....	.....
West Point .....	.....	3	4
Fort Leavenworth	4	1	.....
Washington .....	.....	11	.....
General non-commissioned staff .....	.....	195	.....
Total	3,805	491	53

RECAPITULATION

Recruits assigned	3,805
Re-enlistments.	
Non-commissioned officers	491
Musicians, &c	53
Privates	1,420
Total	5,769

2.—REPORT OF THE INSPECTOR-GENERAL.

HEADQUARTERS OF THE ARMY,
INSPECTOR-GENERAL'S OFFICE,
Washington, D. C., October 15, 1881.

SIR: I have the honor to report that during the past year the office of the Inspector-General's Department have been stationed and employed as follows, namely:

The undersigned was on duty at the headquarters of the Military Division of the Missouri, under the orders of the lieutenant-general commanding, until January, 1881, when he was promoted to the rank of brigadier general, assumed charge of the office at these headquarters and has since performed the various duties pertaining thereto. Before making several special investigations under the orders of the Secretary of War, he has examined the accounts of certain disbursing officers and made the quarterly inspections of the Leavenworth Military Prison as required by section 1348, Revised Statutes.

Inspector-General Nelson H. Davis continued on duty as inspector-general of the Military Division of the Atlantic until July 1, 1881, when by Special Orders No. 98, Adjutant-General's Office, April 29, 1881, he was assigned to the Military Division of the Missouri as inspector-general of that division.

Assistant Inspector-General Roger Jones continued on duty as a

in this office until July 1, 1881, when, by the above named order, he was assigned as inspector general of the Military Division of the Atlantic.

Assistant Inspector General Absalom Baird continued on duty at the headquarters of the Military Division of the Missouri until July 1, 1881, when, by the same order, he was assigned to duty as assistant in this office.

Capt. Joseph C. Breckinridge, Second Artillery, was appointed assistant inspector general, with the rank of major, to date from January 19, 1881, and reported for duty in this office, as directed by Special Orders No. 1, Adjutant-General's Office, January 31, 1881. He was subsequently assigned as inspector-general of the Military Division of the Pacific, by Special Orders No. 98, Adjutant-General's Office, April 29, 1881, and reported for duty at the headquarters of that division July 1, 1881.

Brigadier and Inspector General Randolph B. Marcy continued in charge of the office at these headquarters until January 2, 1881, when, having served over forty consecutive years as a commissioned officer, he was, at his own request, by direction of the President, retired from active service, in conformity with the provisions of section 1243, Revised Statutes. On the occasion of his retirement, the following order was issued by the Secretary of War, viz:

Special Orders No. 1

HEADQUARTERS OF THE ARMY,

ADJUTANT-GENERAL'S OFFICE,

Washington, January 3, 1881.

The following order is, by direction of the Secretary of War, published to the Army:

At his own request, after an active service of over forty-eight years, Brig. Gen. R. B. Marcy, senior Inspector General of the Army, has been placed on the retired list, under section 1243, Revised Statutes.

In the war with Mexico, especially in the Utah expedition and movements connected therewith, in the later war with the Seminole Indians in Florida; in the war of the rebellion, and indeed, throughout his long period of nearly half a century of continuous service, the career of Brigadier-General Marcy has been marked by distinguished military service.

At retirement, he bears with him the record and the honors of a life-time devoted to the cause of the country.

By command of General Sherman:

R. C. DRUM,

Adjutant-General.

Inspector General Edmund Schriver continued on duty at the headquarters of the Military Division of the Pacific until January 19, 1881, when, being over sixty-two years of age, he was, by direction of the President, retired from active service, in conformity with the provisions of section 1244, Revised Statutes.

The following named officers have been performing the duties of acting assistant inspectors general since the date of the last annual report: In Department of the Platte: Lieut. Col. William B. Royall, Third Cavalry.

In Department of the Missouri: Maj. John J. Coppinger, Tenth Infantry.

In Department of the East: Maj. Richard Arnold, Fifth Artillery.

In Department of Texas: Lieut. Col. John S. Mason, Fourth Infantry, until January 31, 1881; Capt. George B. Russell, Ninth Infantry, aid-de-camp, until June 2, 1881; Maj. James P. Martin, assistant adjutant-general, until August 27, 1881; and Capt. George B. Russell, Ninth Infantry, aid-de-camp from that date.

In Department of Arizona: Maj. James Biddle, Sixth Cavalry, on November 26, 1880; Lieut. Frederick A. Smith, Twelfth Infantry, on December 21, 1880; and Maj. Abraham K. Arnold, Sixth Cavalry, from that date.

In Department of the Columbia: Maj. Edwin C. Mason, Twenty-fifth Infantry, until June 25, 1881; and Capt. John A. Kress, Ordnance Department, from that date.

In Department of Dakota: Capt. Robert P. Hughes, Third Infantry, aid-de-camp, until March 9, 1881; and Maj. William W. Sanders, Eighth Infantry, from that date.

In Department of the South: Capt. George B. Russell, Ninth Infantry, until January 4, 1881, since which date no officer has been assigned.

The above named officers have been engaged in inspecting the garrisoned posts of their respective departments, and, under the orders of the department commanders, performing, in general, the duties pertaining to the inspection branch of the service.

In compliance with the requirements of the act of Congress approved April 20, 1874, careful examinations have been made of the accounts of all officers of the Army who have disbursed public money during the past year. The funds received and expended, with the balances reported due to the United States, have been compared and verified by official statements from the Treasury Department and designated depositories. All the reports of these inspections are herewith submitted, ready for transmittal to Congress, as required by the law above mentioned.

Nearly all of the military garrisoned posts have been carefully inspected during the past year, and reports of the same properly forwarded to this office, where they have been examined, and extracts made and submitted to the authorities interested, of matters requiring action.

Department inspectors report the discipline of the troops as very good and constantly improving. They are well armed, clothed, and equipped, and, as a general rule, have been paid regularly, soon after each muster.

The stores furnished by the Subsistence Department, with rare exceptions, are of most excellent quality. The supplies furnished by the Quartermaster's Department are sufficient, and, as a rule, are of very good quality. It is reported that the mules purchased during the past year are far better adapted to the service than those received previously, being larger, deeper chested, with more roomy barrel, rendering them more fitted for the work required; and that more attention is paid to the care of animals than has been heretofore given.

Great improvements have been made during the past year in building, repairing, and renovating the barracks and quarters at most of the military posts, particularly at those posts in the West and Southwest. However, there is yet a great deal to be done to the buildings to make the occupants comfortable. Porches or verandas should be added to all permanent barracks, quarters, and hospitals in Texas, New Mexico, Arizona, California, and Utah; these would add much to the comfort and health of the troops, in fact, are indispensable on account of the heat and glare prevalent in those portions of our country during the greater part of the year.

Most of the work of building and repairing has been done by the troops. It would be a great thing for the discipline of the Army if more of the labor now performed by the soldier could be done by civilian employes, such as building posts, quarters, driving teams, &c. There is not a doubt that this constant hard work—not military in character—causes much dissatisfaction and a great many desertions, aided in part

the demand for laborers and the high wages paid all over the West for railroad building and other improvements.

Maj. A. K. Arnold makes a recommendation in his annual report, in relation to the apprehension of deserters, as follows:

I recommend that the reward paid for the apprehension of deserters be increased to Thirty dollars is no inducement to citizens to apprehend deserters. In some cases it has cost them nearly that sum. Soldiers should have the reward also. I believe that this method would, in a little time, do more to lessen desertion than any other method proposed. Citizens do not look upon desertion as a crime, and the reason is that they are indifferent as to whether a deserter is caught or not, inasmuch as they harbor them and shield them from arrest.

The following extracts, the first from Lieut. Col. W. B. Royall's annual report, and the second from that of Major A. K. Arnold, I concur fully:

It is the object of the Army to raise the standard of the enlisted man and to make him proud of his position, and to induce him to feel—as the soldiers of other countries do—that he is certainly equal to the ordinary citizen of the country in which he lives. But in the orders or regulations that govern, we find them, inconsistently, the equals of the citizen. When a quartermaster's employé travels, his expenses are allowed at \$1 per day; when a soldier travels on detached service, 75 cents is allowed him per day for commutation of rations. I know of an instance that came under my own eye, of a sergeant who was ordered from Fort Cameron, Utah, to identify a deserter; knowing that the amount of his commutation would not be sufficient, his captain loaned him \$60 to defray the necessary expenses of the journey. The first meal the sergeant gets after reaching the railroad costs him \$1.50. This discrepancy is too apparent and needs no further comment. I would recommend that the ration, in such cases, be commuted to at least \$1.50 per day, this being the rate I am informed allowed to the Creditable team of last year. While on detached duty, I might mention that the extra-duty pay of clerks in the performance of duty in the quartermaster's department at posts ought, at least, to be rated at the highest grade, instead of receiving 20 cents a day as laborer. Oftentimes this class of men have very responsible positions to fill. They are frequently employed as adjutants of officers without experience, who are often dependent upon the soldier for the performance of the duties required. It does seem that this class of men ought to be allowed the highest rate of extra-duty pay.

I also recommend that officers serving west of the Mississippi—where travel is by stage, coach and railroads, the fare per mile being largely in excess of that allowed for officers traveling under orders—be allowed actual transportation expenses allowance of \$3 while traveling. This would be no more than justice, as the expenses incurred are much more than is covered by the mileage now fixed by

The following is an extract from a report of an inspection of Fort Sill, Indian Territory, made September 1, 1881, by Maj. J. K. Mizner, Fourth Cavalry, commanding:

The Kiowa and Comanche tribes are the most numerous of the bands of Indians in the Territory. These, with several small bands, numbering in all about 4,000 Indians, are what is known as the Kiowa, Comanche, and Wichita Agency, which is situated on the Washita River, 35 miles north of Fort Sill, and a majority of the bands have moved in that direction and established their villages. The general character of these Indians has been friendly, and no serious trouble has occurred during the past year. On June 7 the agent called upon me for troops to protect the agency against the Indians, stating that he had information that the Kiowas, Comanches, a part of the Wichitas, and others, had decided to go upon the war path, and make their first strike at the agency, dealing with friendly Indians as with the enemy. Just at this time the post had very fortunately been reinforced by the arrival of two companies of the Tenth Cavalry, which had been ordered from Texas for duty in the Department. With these and a few other troops available, I ordered it only to the agency, and it is believed that this prompt appearance of a body of troops averted what might otherwise have resulted in a serious outbreak. Experience with Indians, and a knowledge of their natural restlessness, and the influence of the feeling to submit to the ever varying exactions of the Indians, and the frequent aggravations they are subjected to, makes it very important that strong garrisons be maintained in the Indian Territory near the agencies. The garrison of Fort Sill has never been too large, and should, in my opinion, never be

less than seven companies, four of which should be full companies of cavalry. Companies of cavalry would be better. The quarters and stables are ample for companies of cavalry, and with that number present it would be possible, if necessary, to re-enforce the garrison at Fort Reno. "The necessity of re-enforcement at that post is likely to arise at any time."

Recent events demonstrate very forcibly the importance of strong garrisons being maintained at or near all Indian agencies as well as at Fort Sill. The wild Indian has great respect for *force*: a weak garrison only invites trouble, mischief, and outbreak.

Schools have been established at most of the military posts, schools houses and chapels built, or buildings set apart for school purposes and chapel. The great difficulty now is the lack of competent school teachers and chaplains.

Regular target practice has been carried on during the year at military posts and in every company in the Army. While it has been frequently necessary to dispense with drills, the target practice has been strictly attended to, and, as a consequence, the troops have improved wonderfully in the art of shooting. This is true of each individual company throughout the Army. In almost every company a number of men who have attained to nearly the greatest proficiency.

With this great improvement in marksmanship, I believe it is in the opinion of most cavalry officers that for general cavalry service the carbine is superior to the rifle, particularly so were the charge of powder in the carbine cartridge somewhat increased. If the rifle is to replace the carbine in the cavalry it would be well that a board of cavalry officers be convened to fix upon some uniform mode of carrying the rifle while mounted. At the present time no two companies carry alike.

The military prison at Fort Leavenworth has been inspected quarterly by an officer of the Inspector-General's Department as required by law. The prisoners confined here are fully supplied with ample clean clothing and bedding, and with wholesome, well cooked, and sufficient food. They are permitted the use of newspapers and books and the privilege of writing to their friends. The principal trades which the convicts are employed are the making of boots and shoe wagon and ambulance harness, and barrack chairs for the Army. The boots, &c., made by the prisoners are of most excellent quality and finish.

Cleanliness and good order are apparent everywhere in the shops, barracks, kitchens, grounds, hospital, &c. The government of the convicts is humane and kind, but withal firm and uniform.

During the past year many improvements and additions have been made to the prison buildings, offices, quarters, shops, &c. The work on the prison wall has been rapidly pushed forward and is complete, which adds much to the safekeeping of the prisoners and diminishes the number of sentinels required.

There is a limit to the capacity of this prison, and I would suggest that the number of prisoners to be confined within its walls be limited to the health of the convicts demands this, and in my judgment that number should at no time exceed 450.

The disbursements of the funds appropriated for the maintenance of the prison have been examined and found to be properly made and necessary.

I fully concur in the following recommendations of Col. N. H. Day

"It is respectfully suggested that a concentration of the troops at a less number of military posts and in larger garrisons than now exist would increase their efficiency."

operations, promote their general welfare, and result in greater economy of government. Now that railroads have been constructed and are being extended through the country inhabited or frequented by the Indian tribes, the necessity formerly existed for numerous small and detached posts has ceased.

Posts established at important centers for operation are in my judgment, and I think also that the proper buildings to accommodate the troops and posts should be erected from Congressional appropriations, and not in a piecemeal manner by the labor of the troops; their services are needed for military instructional services.

I am respectfully called to the large numbers of absentees on detached service, enlisted men on extra, special, and daily duty. The consequence is that the troops are frequently reduced to a skeleton strength for duty. Under the operation of the policy pursued and orders to enforce it, this condition of things is a necessity, and it tends to destroy that pride which officers and men should have in their profession and respective commands. It would, in my opinion, be far more in the public interests if many of the duties, including clerical, now performed by the troops, were executed by hired civilian employees."

Assignment of cavalry recruits to regiments and companies, before they are properly instructed at depots, to fill requisitions, is an unnecessary.

It would, I think, be highly advantageous to the Army and promote economy if some provision was made by Congress to anticipate by law the reduction of regiments by discharge, &c., and to provide for enlistments, so that all recruits should be thoroughly instructed in their respective arms of the service before being sent from the depots to the regiments.

Orders No. 24, Adjutant-General's Office, February 22, 1881, relating to the sale of intoxicating liquor at military posts and stations, has not having the effect desired—that is, of inducing temperance among the troops. Lieut. Col. W. B. Royall reports as follows:

"Posts in this department have certain defined limits, say, generally, a reservation of five square miles. Outside of these reservations there are an unlimited number of grog shops to which the soldier can steal out of garrison when not on duty, and indulge to his heart's content. Being out of sight of his officers and away from control, he has full scope to carouse and get drunk. Before this order went into force there were no inducements for the soldier to go out of the garrison for his grog, and he remained under the influence of liquor at the post, there was a remedy and a care of him, a guard-house to confine him until he became sober, and to prevent him from doing harm. Now he is under no restraint at these whisky shops, and he gets into the habits of the place, and sometimes is murdered by the lawless men of the place. The commanding officer at Fort Bridger informed me that he had a soldier shot not long since by being in a drunken brawl with some citizens at one of the ranches just outside the limits of the post, whom he believes would have been killed if he had not been denied the privilege of buying his dram at the post. An officer of the post of Niobrara informed me that Lieutenant Cherry's death was remotely attributed to this same order. It has long been an established principle that you cannot legislate to restrain men's appetites or their passions. It has been so in all our large cities, and the best way found is to license an evil you cannot prevent."

The employment of soldiers as servants, by officers, is in most cases impracticable, on account of the exorbitant sums demanded for service; and at many posts, servants cannot be obtained at any price. The restriction to the use of enlisted men as servants should be so modified as to enable an officer to employ a soldier as servant, without compelling him to violate the law or disobey existing orders. When servants cannot be had at reasonable rates of wages, an officer should be permitted to employ an enlisted man to wait upon him. No soldier should be required to act as servant to an officer except by the soldier's own consent; he should be thoroughly instructed in his military duties, and not being so detailed; he should be regularly detailed for the post orders; he should be so reported on the morning and evening reports and muster roll of his company; he should be required

to keep his arms, &c., in good condition, and to attend all musters and inspections of his company. Further, the amount of *the pay proper* the soldier should be dropped from the officer's pay account and taken up and accounted for by the paymaster; and, in addition, the officer should be required to pay a fixed sum per month to the soldier.

Section 1232 of the Revised Statutes provides that "no officer shall use an enlisted man as a servant in any case *whatever*," and I am confident that a modification of this law, as above recommended, would prove beneficial to the service, and be satisfactory to officer and enlisted man. No officer of the Army wishes to violate the law in this regard, but in many sections of our country it is absolutely unavoidable.

I would respectfully ask, as has been frequently done by my predecessor, General Marcy, in his annual reports, that the Inspector-General's Department be placed on an equal footing with the other staff departments as regards clerical assistance. All other branches of the Army are provided with clerks, but for the officers of this department, with the exception of the senior here at the War Department, no provision is made.

The officers of this department are gentlemen of rank and of many years' service, and their status should not be that of beggars. Now an officer has more work or writing than he can possibly master, and must go (no matter how humiliating) to some other department, and borrow a clerk, if he can. There is much work that an officer of long service should not be required to do himself. Copying reports of inspections, investigations, keeping up the records of an office, &c., are properly the work of a clerk, and in every inspector's office there is much of this kind of labor to be performed.

I respectfully recommend that in the next annual estimates for the Army an item of \$4,800 be embraced therein for the payment of third-class clerks, for service in the office of inspector-general at the headquarters of the military divisions of the Missouri, Pacific, and Atlantic. I respectfully request a favorable indorsement by the General of the Army to this recommendation.

Inclosed I forward herewith copies of the annual reports of the different inspecting officers, so far as they have been received.

Respectfully submitted.

D. B. SACKET,

Brigadier and Inspector General, U. S. A.

The ADJUTANT-GENERAL UNITED STATES ARMY.

3.—REPORT OF LIEUTENANT-GENERAL SHERIDAN.

HEADQUARTERS MILITARY DIVISION OF THE MISSOURI,

Chicago, Ill., October 22, 1880.

GENERAL: I have the honor to submit herewith, for the information of the General of the Army, the following report, covering the operations within the limits of my command, accompanied by the reports of department commanders:

Since my last annual report, dated October 22, 1880, no permanent change has been made in the organization of the division, which consists of the Department of Dakota, commanded by Brig. Gen. A. Terry, comprising the State of Minnesota and Territories of Dakota.

Montana, garrisoned by twenty permanent posts, one cantonment where the Northern Pacific Railroad crosses the Little Missouri River, a camp at Upper River Agency, Montana, and one small summer camp; the Department of the Platte, commanded by Brig. Gen. George Crook, comprising the States of Iowa and Nebraska, the Territories of Wyoming and Utah, and a portion of Idaho, containing seventeen permanent posts, including the post of Fort Thornburgh (just located but not constructed), near the junction of the Duchesne and Green rivers in Utah; the Department of the Missouri, commanded by Brig. Gen. John Pope, comprising the States of Illinois, Missouri, Kansas, and Colorado, the Indian Territory, and the Territory of New Mexico, and two posts in Texas, garrisoned by twenty two permanent posts, with camps at White River, and the Uncompahgre River in Colorado, and at Snake River in Wyoming, also a camp at old Fort Cummings, and a temporary camp at Ojo Caliente, New Mexico; the Department of Texas, commanded by Brig. Gen. C. C. Augur, comprising the State of Texas, garrisoned by ten permanent posts and twelve camps and subposts along the southwestern frontier.

The Department of Texas and the Indian Territory were taken from the division December 18, 1880, on the organization of the Division of the Gulf, and the post of Fort Elliott, Texas, on February 4, 1881; but were restored to the division on May 6, 1881, when the Division of the Gulf was abolished.

To garrison these posts and furnish troops for active operations in the field, there are in this division eight regiments of cavalry, twenty regiments of infantry, twelve companies of which are mounted, and one battery of artillery, aggregating 14,076 officers and men, distributed as follows:

Department of Dakota, two regiments of cavalry, 1,505; one regiment of infantry, mounted, 435; six regiments of infantry, 2,548; total, 4,488. Department of the Platte, two regiments of cavalry, 1,252; three regiments of infantry, 1,160; total, 2,412. Department of the Missouri, two regiments of cavalry, 1,430; six regiments of infantry, two companies of which are mounted, 2,543; total, 3,973. Department of Texas, two regiments of cavalry, 1,440; one battery of artillery, 38; four regiments of infantry, 1,725; total, 3,203.

Although the Department of Dakota has, by far, the largest number of Indians from whom hostile acts might be expected, these have been at peace during the past year, and seem to have made some advancement in labor and in the cultivation of the soil, at the different agencies. The exceedingly annoying condition of having a small body of our hostile Indians, with Sitting Bull, just across the boundary line, in British Columbia, has been removed by the surrender of this head man. Nearly all of the Indians who clustered around him have come over, either with him or in advance of him, and have submitted to the authority of the government. So long as this body of Indians remained across the line, they formed a nucleus with whom all dissatisfied or disaffected ones, at the agencies, could take refuge. For this reason I supported General Terry in his efforts to get Sitting Bull back, and I think the results will be satisfactory. Although Sitting Bull was not much of a warrior, and had no prestige among Indians on that account, still he was stubborn in his resistance to the government reservation system, and naturally had many adherents among the disaffected. His original offense was his refusal to go to the reservation of his tribe, the Uncompagis, at Standing Rock; he wanted to live wild. He was not a chief in that time, but was the leader of a small band of about sixty lodges, who held

with him the same feelings of bitter opposition towards being civilized. He was in the outskirts of the fight with Custer, but not conspicuous, and shortly afterwards struck out, with his small band, for British Columbia, being subsequently followed, from necessity, by other bands of Sioux. I have seen in newspapers long accounts and narratives purporting to be descriptions of the Custer battle, as related by Sittie Bull, which had, in my opinion, but little truth in them, and historians are cautioned against receiving them as correct. The Northern Cheyennes and the Ogallala Sioux, the former under two or three of the principal chiefs, and the latter under Crazy Horse, as their leaders, were the fighting at the battle of the Little Horn when Custer fell.

With the exception of the incursions of Indians and half breeds belonging to British Columbia, and their passing through the cattle herds of Montana to kill buffalo south of the Missouri River, the condition of Indian affairs in the Department of Dakota has been favorable during the past year. The eastern frontier settlements are rapidly passing westward, and a year or two will carry them forward until they meet the frontier of Montana, which is advancing in this direction. The Northern Pacific Railroad will be at Fort Keogh in November, and will open up fine grazing and agricultural lands lying on the Yellowstone and between it and the Big Horn Mountains, from which section the road will undoubtedly reap a rich reward. To General Terry, for his good management, and to the troops who so faithfully served in the field during the bitter weather of last winter in collecting and bringing in bands of hostile Sioux who had surrendered, I return my sincere thanks. In this connection, the services of Maj. Guido Ilges, Fifth Infantry, and his command, are especially deserving of commendation.

In the Department of the Platte no event of military importance has occurred. The posts of Sheridan and Hartsuff have been abandoned, having fulfilled the purposes for which they were established. The post of Fort Niobrara has been completed and a new post has been located upon the new Ute Reservation, at the junction of the Duchesne and Green Rivers, in Utah. Although they have had plenty of time, the Uncompahgre Utes, who were to move to this vicinity from the Department of the Missouri, have not yet arrived at the new agency appointed for them, on the east side of Green River, not far distant from the post above mentioned; nor have the White River Utes yet reached the Uintah Reservation, the place the commissioners have selected for them as their future home. Hopes are, however, entertained that, before the first of the new year, both the Uncompahgre and the White River Utes will reach their respective destinations without serious trouble. Still, some fears are entertained that they may not go there, and the impression has so firmly settled itself in the mind of the commission that, at the request of Commissioner Russell, the General of the Army has directed that the White River Utes be driven to the Uintah agency. I am afraid, however, that but little can be done towards carrying out this order before spring, and will hope that better results will have been obtained before that time. No one can form any idea, excepting by personal examination, of the rough and broken country of the Gunnison and White Rivers—the old home of the White River Utes—and I still hope for a peaceful solution and settlement of this complication without necessity for military operations.

The cattle, mining, and agricultural interests have greatly increased in this department, especially in the Territories of Utah and Wyoming, and in that part of Idaho belonging to it. Along the base of the Big Horn Mountains, especially west of Fort McKinney, beautiful far

have sprung up; fields of wheat, oats, and barley, and hundreds of thousands of cattle, are now to be found where only two or three years ago was the land of the Indians and the buffalo.

The department has been economically administrated and the condition of the service improved. At its ensuing session Congress will be requested to make an appropriation for the new post at the junction of the Duchesne and Green Rivers, in Utah, on the reservation selected for the future home of the Uncompahgre Utes.

In the Department of the Missouri small raiding parties of Apache Indians, the remnant of Victoria's band, joined by a few young men from the Mescalero Reservation, in all not to exceed sixty in number, caused widespread alarm and serious loss of human life in Southern New Mexico last winter. The band came in from Mexico, south of Fort Cummings, and after making a raid of extraordinary boldness, recrossed into Mexico near their point of entrance. They killed a number of people, and, I am sorry to say, received but little punishment in return. This same band re-entered Southern New Mexico in July, and raided the same region of country, killing Lieut. G. W. Smith, Ninth Cavalry, and several people, and again escaping into Mexico without serious loss, so far as I have been able to learn from any official data derived at these headquarters. I would advise that, if possible, the consent of the Mexican Government be obtained for our troops to cross and catch this small band of freebooters, or at least to break down the confidence with which the boundary line inspires them in their ability to escape punishment.

As previously stated, the Uncompahgre Utes have moved from the Uncompahgre Valley, in this department, for their new reservation and agency, near the junction of the Green and White Rivers, Utah, in the Department of the Platte. They would not have moved at all but for the presence of General Mackenzie and his command in the Uncompahgre Valley. About the same time the White River Utes also started from the White River Valley, near the scene of the Thornburg fight, to go to their new place in the Department of the Platte—the Uintah Reservation in Utah—but, as already mentioned, neither these nor the Uncompahgres have as yet arrived at their newly selected agencies.

Little Chief's band of Northern Cheyennes, in the Indian Territory, which gave some anxiety for a year or two past, has at last been sent back to their friends in the north, the Sioux. Little Chief's band was sent to Indian Territory originally because Congress had made provision for the Northern Cheyennes, by appropriation, with their kinsfolk, to Southern Cheyennes. The bands of Little Wolf, Dull Knife, and other chiefs went to the Indian Territory, seemingly satisfied with this arrangement, and were subsequently followed there by Little Chief. Congress had made appropriations for their support with the Southern Cheyennes; their reservation or lands were there; this they seemed to comprehend, but the misfortune was that a large number of the tribe were permitted to stay in the Sioux country, in the north—their natural home—among those so left there included many of the relatives of the bands of Little Chief, Little Wolf, and Dull Knife. This separation of families and friends, and the homesickness which Indians feel far more keenly than any other people, produced discontentment, and the escape from the Indian Territory of Little Wolf and Dull Knife, with their bands, was the well known result. Then, after the eventual capture and surrender in the north of what remained of these escaped bands, they were not sent back to the Indian Territory, but were permitted to live in the north. This made a still greater separation of relatives and friends, so

there was nothing to be done except to recommend, as I repeatedly did, that either Little Chief's band should be sent to the north or that *all* the Northern Cheyennes should be sent down to the Indian Territory and be placed with the Southern Cheyennes. Apparently no heed was paid to this until lately, when the Sioux finally offered the Northern Cheyennes a home upon their own spacious reservation, and I presume that Congress will hereafter make appropriation for the latter named Indians with the Sioux, instead of as heretofore with the Southern Cheyennes. I am glad this question is settled; it is a mistake to say that the Northern Cheyennes were treated with injustice, but it is a mistake to say that they were treated in a bungling and impolitic manner.

I earnestly recommend Congressional action to keep out intruders from the Indian Territory. Had it not been for the military, the territory of Oklahoma would have now been covered with settlements. The intruders have been kept out by companies of troops marching from east to west and back again, on the south side of the line between the Indian Territory and the State of Kansas, while the intruders march to and fro in Kansas, on the north side of the same line. The question as I understand it, is this: Congress bought certain lands from Indians belonging to the Indian Nation for the purpose of colonizing other bands of Indians upon these lands. After some hostile Indians had been settled on portions of these lands, some of the members of Congress and Senators of adjacent States, becoming alarmed at the assembling of these Indians in the Indian Territory, secured the passage of an act prohibiting the removal of certain outside Indians to the Indian Territory. Then the people styled the "intruders" set up the claim that what was left of this purchase, which is now named Oklahoma, was subject to the same conditions of settlement as any other public domain, and they still persist in their purpose of obtaining possession of it. I therefore earnestly recommend some Congressional action which will settle this question and release the military from the complications involved by the Oklahoma trouble.

The completion of several lines of railway within the Department of the Missouri, and their rapid extension into country lying beyond, have done much to facilitate the movement and supply of troops. The Atchison, Topeka, and Santa Fe Railway has been completed to Dering, connecting with the Southern Pacific road from the west, and both of these lines are now running to El Paso, on the Rio Grande, while the Mexican Central is rapidly pushing from that point into Chihuahua. The Atlantic and Pacific Railway is running from Albuquerque, via Fort Wingate, to beyond the western boundary of New Mexico, and is being rapidly constructed on the 35th parallel route, far into Arizona.

The service of this department has been economically and efficiently administered by General Pope. The commendation which, in his accompanying report, he bestows upon General Mackenzie, for the able management by the latter of the delicate details of the removal of the Uncompahgre Utes, is fully deserved, whilst the praise also awarded a number of young officers of the Ninth Cavalry, for their energetic pursuit and gallant action during the Indian raids in New Mexico, was doubtless well earned.

Military field operations in Texas during the year have been confined to the pursuit of small raiding parties from Mexico. The one which did most damage was severely chastised by First Lieutenant John L. Bull of the Twenty-fourth Infantry.

I coincide with the department commander, General Augur, as to the

desirability of establishing the six small posts in the sections of country named by him in his accompanying report, and as soon as the exact locations are decided upon, the work of building can go on, as the money for construction has already been appropriated by Congress and is now available.

The extensive construction of railways in Texas has greatly contributed to the economical administration of this department and to the effectiveness of military operations. The good feeling which exists between our Mexican neighbors and ourselves along the Rio Grande frontier has almost entirely relieved the embarrassments which for a long time existed in that direction, and I most cheerfully pay tribute to the lamented General Canales, of the Mexican army, for his kindly feelings and cordial co operation in the attainment of this most desirable result.

The department has been ably and economically administered, and the thanks of the division commander are tendered to Lieutenant Bullis for his successful pursuit and merited chastisement of the Indians who murdered Mrs. Lawrence and robbed her home.

The troops in this division are efficient and their discipline is very good, considering the smallness of the companies and the amount of hard work to be performed in fighting Indians, building posts, making roads, guarding settlements and railroads, and escorting parties engaged in surveying projected railways, boundary lines, and public lands in the Territories. The rights and the lands of the Indians have also to be protected against encroachments, and I have to reiterate what I have said in former reports, that the Army is much too small to efficiently and economically perform the duties required of it. I would recommend greater activity in enlistments. This could be brought about by modification of the rigid standards of weight and height for recruits.

The school of instruction for cavalry and infantry, at Fort Leavenworth, Kansas, will be organized shortly after the 1st of November.

I have the honor to be, general, very respectfully, your obedient servant.

P. H. SHERIDAN,
Lieutenant-General, Commanding.

Brig Gen. R. C. DRUM,
Adjutant-General, United States Army, Washington, D. C.

3 A.--Report of Brigadier General Terry.

HEADQUARTERS DEPARTMENT OF DAKOTA.

Fort Snelling, Minn., October 9, 1881.

SIR: I have the honor to submit the following report of the military operations which have taken place in this department since the 4th day of October, 1880, the day on which my last annual report was made. At that time the force in the department consisted of the following-named regiments: The Second Cavalry, the Seventh Cavalry, the Third Infantry, the Fifth Infantry, the Seventh Infantry, the Eleventh Infantry, the Seventeenth Infantry, the Eighteenth Infantry, the Twenty-Fifth Infantry.

These troops were at that time distributed to posts and stations as follows:

At Fort Snelling, Minn., the regimental headquarters and Companies C, H, and K, Seventh Infantry.

At Fort Sisseton, Dak., Companies F and I of the Seventeenth Infantry.

At Fort Pembina, Dak., Companies E and K of the Seventeenth Infantry.

At Fort Totten, Dak., troops F and K of the Seventh Cavalry, and Company C of the Seventeenth Infantry.

At Fort Randall, Dak., the regimental headquarters and Companies B, F, G, and I of the Twenty-Fifth Infantry.

At Fort Hale, Dak., Companies C and E of the Twenty-Fifth Infantry.

At Fort Sully, Dak., the regimental headquarters and Companies G, I, and K of the Eleventh Infantry.

At Fort Bennett, Dak., Company E of the Eleventh Infantry.

At Fort Yates, Dak., the regimental headquarters and Companies B, D, and H of the Seventeenth Infantry, and troops B and D of the Seventh Cavalry.

At Fort Meade, Dak., the regimental headquarters and troops A, E, G, H, and M of the Seventh Cavalry, and Companies A, D, H, and K of the Twenty-Fifth Infantry.

At Fort Abraham Lincoln, Dak., troops I and L of the Seventh Cavalry, Company D of the Eleventh Infantry, and Company G of the Seventeenth Infantry, and Company F of the Seventh Infantry.

At the Cantonment Bad Lands, Dak., Company D of the Seventh Infantry.

At Fort Stevenson, Dak., Companies G and I of the Seventh Infantry.

At Fort Buford, Dak., Companies A, B, and E of the Seventh Infantry.

At Fort Keogh, Mont., the regimental headquarters, and Companies A, B, C, D, E, F, G, H, I, and K of the Fifth Infantry, and troops B, and E of the Second Cavalry.

At the Cantonment Poplar Creek Agency, Mont., Companies B and F of the Eleventh Infantry.

At Fort Custer, Mont., the regimental headquarters, and troops C, I, and M of the Second Cavalry, and Companies C and H of the Eleventh Infantry.

At Fort Assiniboine, Mont., the regimental headquarters and Companies A, B, C, D, E, F, and K of the Eighteenth Infantry, and troops H and L of the Second Cavalry.

At Fort Benton, Mont., Company A of the Third Infantry.

Fort Shaw, Mont., the regimental headquarters and Companies A and G of the Third Infantry, and Companies G and H of the Eighteenth Infantry.

Fort Logan, Mont., Company I of the Eighteenth Infantry.

At Fort Ellis, Mont., Troops D, F, and K of the Second Cavalry, and Companies C and E of the Third Infantry.

At Fort Missoula, Mont., Companies B, D, H, and I of the Third Infantry.

At Fort Maginnis, Mont., Company K of the Third Infantry.

The regiments serving in the department remain unchanged, but various changes, which will be spoken of hereafter, have been made, and the resulting distribution is as follows:

At Fort Snelling, Minn., the regimental headquarters and Companies C, H, and K of the Seventh Infantry.

At Fort Sisseton, Dak., Companies F and I of the Seventeenth Infantry.

At Fort Pembina, Dak., Companies E and K of the Seventeenth Infantry.

At Fort Totten, Dak., Troops I and K of the Seventh Cavalry, and Company C of the Seventeenth Infantry.

At *Fort Randall, Dak.*, the regimental headquarters and Companies B, F, and G, and I of the Twenty fifth Infantry.

At *Fort Hale, Dak.*, Companies C and E of the Twenty fifth Infantry.

At *Fort Sully, Dak.*, the regimental headquarters and Companies G, J, and K of the Eleventh Infantry.

At *Fort Bennett, Dak.*, Company E of the Eleventh Infantry.

At *Fort Yates, Dak.*, the regimental headquarters, and Companies A, D, and H of the Seventeenth Infantry, and Troops B and D of the Seventh Cavalry.

At *Fort Meade, Dak.*, the regimental band and Troops A, C, E, G, H, and M of the Seventh Cavalry, and Companies A, D, H, and K of the Twenty fifth Infantry.

At *Fort Abraham Lincoln, Dak.*, the regimental headquarters and Troop L of the Seventh Cavalry, Company F of the Seventh Infantry, Company D of the Eleventh Infantry, and Company G of the Seventeenth Infantry.

At the *Cantonment Bad Lands, Dak.*, Company D of the Seventh Infantry.

At *Fort Stevenson, Dak.*, Companies G and I of the Seventh Infantry.

At *Fort Buford, Dak.*, Troop F of the Seventh Cavalry and Companies A, B, and E of the Seventh Infantry.

At *Camp Poplar River, Mont.*, Companies B and F of the Eleventh Infantry.

At *Camp Porter, Mont.*, Company A of the Eleventh Infantry and Company B of the Seventeenth Infantry.

At *Fort Keogh, Mont.*, the regimental headquarters and Companies A, B, C, D, E, F, G, H, I, and K of the Fifth Infantry, and Troop E of the Second Cavalry.

At *Fort Custer, Mont.*, the regimental headquarters and Troops C, F, G, I, and M of the Second Cavalry, and Companies C and H of the Eleventh Infantry.

At *Fort Assiniboine, Mont.*, the regimental headquarters and Companies A, B, C, D, E, F, H, and K of the Eighteenth Infantry, and Troops H and L of the Second Cavalry.

At *Fort Shaw, Mont.*, the regimental headquarters and Companies A, F, and G of the Third Infantry.

At *Fort Maginnis, Mont.*, Troops A, B, and K of the Second Cavalry, Company K of the Third Infantry, and Companies G and I of the Eighteenth Infantry.

At *Fort Ellis, Mont.*, Troop D of the Second Cavalry, and Companies C and E of the Third Infantry.

At *Fort Missoula, Mont.*, Companies B, D, H, and I of the Third Infantry.

The following tables show the strength of the several garrisons at the date of the returns for August, the last received at these headquarters:

DISTRICT OF MONTANA.

Posts.	Officers.	Enlisted men.	Indian scouts.
At Assiniboine, Mont.	37	394	
At Fort Shaw	15	150	
At Fort Keogh	18	224	7
At Fort Custer	11	114	
At Fort Missoula	13	133	
Total	92	1,015	7

INDEPENDENT POSTS.

Posts.	Officers	Enlisted men
Fort Snelling	16	131
Fort Snareton	8	74
Fort Pembina	8	67
Fort Cotton	10	167
Fort Randall	19	215
Fort Hancock	6	93
Fort Sully	18	122
Fort Lincoln	3	40
Fort Yates	22	297
Fort Meade	35	514
Fort Abraham Lincoln	21	171
Fort Abraham Lincoln Ordnance Depot	1	
Cantonment Bad Lands	1	48
Fort Stevenson	6	93
Fort Buford	15	196
Camp P. plar River	8	51
Camp Porter	6	52
Fort Keogh	40	454
Fort Custer	30	342
Total	269	3,054

GRAND TOTAL.

District of Montana	92	1,015
Independent posts	269	3,054
Total	361	4,069

The following is a general record of events during the year, principally from the post returns:

September 3, 1880, Company F, Fifth Infantry, returned to Fort Keogh where it remained until September 30, on which date the company turned to its former camp near government saw mill. Distance marched, 30 miles.

September 6, 1880, Company A, Second Cavalry, left Fort Keogh en route to Fort Custer as escort to public funds, under charge of J. Bates, paymaster, U. S. A. The company returned to Fort Keogh September 16. Distance marched, 220 miles.

September 12, 1880, Company K, Fifth Infantry, left Fort Keogh detached service. Distance marched during the month, 343½ miles.

September 13, 1880, Lieutenant Brewer, Seventh Cavalry, and detachment, returned to Fort Yates, Dak., from a scout across the Black Hills stage road.

September 14, 1880, Company C, Seventh Cavalry, returned to Fort Meade, from its camp on the Bell Fourche River, having thoroughly scouted the country in that vicinity. Distance marched, 145 miles.

September 18, 1880, Lieutenant Greene, Seventh Infantry, with a detachment of ten enlisted men, left Fort Buford in search of cattle belonging to the beef contractor at that post, and which were alleged to have been stolen by Indians. Lieutenant Greene and his detachment returned to their station September 22, having recovered the stock. Distance marched, 99 miles. No Indians seen.

September 19, 1880, Lieutenants Ogle and Chubb, Seventeenth Infantry, with a detachment of six enlisted men and three Indian scouts, left Fort Yates, and proceeded beyond the Black Hills stage road for purpose of observing the movements of a party of Indians belonging to the Standing Rock Agency, hunting on that reservation.

September 20, 1880, Company M, Seventh Cavalry, Lieutenant Spill, Seventh Cavalry, commanding, left Fort Meade, Dak., as escort to United States surveying party, supposed to be operating along the northern boundary line of Montana Territory.

September 25, 1880, Companies B and F, Eleventh Infantry, left Fort Custer, Mont., *en route* to Poplar River Agency, to establish a camp in that vicinity.

October 1, 1880, Company K, Fifth Infantry, left camp on Sweeney Creek, Mont., *en route* to its station, Fort Keogh, arriving same day. Distance marched, 35 miles.

October 2, 1880, Lieutenants Ogle and Chubb, Seventeenth Infantry, detachment returned to Fort Yates from detached service in the field, observing the movements of a hunting party of Indians.

October 8, 1880, Company C, Third Infantry, left Fort Ellis for the purpose of repairing the military telegraph line between that post and Helena, Mont. Distance traveled during the month, 78 miles.

October 12, 1880, Camp Poplar River, Mont., established, Companies B and F, Eleventh Infantry, from Fort Custer, arriving this day and taking station.

October 18, 1880, Company G, Third Infantry, left Fort Maginnis, Mont., where it was temporarily attached for duty, *en route* to Fort Shaw, arriving October 25, 1880. Distance marched, 189 miles.

October 18, 1880, Camp Porter, Mont., on the right bank of the Yellowstone, about 3 miles above the mouth of Glendive Creek, was established by Companies A, Eleventh Infantry, and B, Seventeenth Infantry, on the 18th day of October, 1880, as a winter camp for troops guarding working parties and material on the Northern Pacific Railroad.

October 22, 1880, Company E, Third Infantry, returned to Fort Shaw for duty at government saw mill near that post.

October 25, 1880, Company M, Seventh Cavalry, returned to Fort Meade from detached service with a surveying party. Distance marched, 24 miles.

October 27, 1880, Fort Logan abandoned, Company I, Eighteenth Infantry, leaving this day *en route* to Fort Shaw. One non-commissioned officer and one private, Company I, Eighteenth Infantry, were left at the post in charge of public property.

October 28, 1880, Company F, Seventh Cavalry, arrived at Fort Totten, Dak., and took station.

Changes of stations of troops during this month.

Company F, Seventh Cavalry, from Fort Totten to Fort Buford.

Company I, Seventh Cavalry, from Fort Abraham Lincoln to Fort Totten.

Company H, Eighteenth Infantry, from Fort Shaw to Fort Assiniboine.

Company I, Eighteenth Infantry, from Fort Logan to Fort Shaw.

October 20, 1880, Lieutenant Kishngbury, Eleventh Infantry, with a party of twelve enlisted men, ten Indian scouts and an interpreter, left Fort Custer for mouth of the Musselshell River, to receive and take out certain stores ordered to that place for certain anticipated contingencies of field service. He arrived at that place on the 6th of November, and was attacked by a party of Indians on the 7th of November, who left after an hour's skirmishing, with the intention, as reported by Lieutenant Kishngbury, of getting re-enforcements and return-

ing to the attack. The attacking party killed one and wounded three horses.

November 1, 1880, Company F, Fifth Infantry, returned to Fort Keogh from detached service at the Pinerias. Distance marched, 18 miles.

November 2, 1880, Companies D and I, Third Infantry, returned to Fort Missoula from detached service, repairing the Mullen Road. Distance traveled, 374 miles.

November 3, 1880, Company A, Second Cavalry, left Fort Keogh for the Pinerias, and remained there during that month cutting logs. Distance marched, 18 miles.

November 4, 1880, Company C, Fifth Infantry, returned to Fort Keogh from detached service at the Pinerias. Distance marched, 18 miles.

November 8, 1880, Company A, Fifth Infantry, left Fort Keogh and proceeded to the Rosebud, as escort to public funds under charge of Major Baird, paymaster, U. S. A. Returned November 11, 1880. Distance marched, 80 miles.

November 11, 1880, Company I, Eighteenth Infantry, arrived at Fort Shaw, Mont., and took station.

November 11, 1880, Company C, Third Infantry, returned to Fort Ellis, Mont., having completed the repair of the military telegraph line between Fort Ellis and Helena, Mont.

November 12, 1880, Troops B and E, Second Cavalry, and Company H, Fifth Infantry, left Fort Keogh for the mouth of the Musselshell River, in consequence of an engagement with Indians by a party under Lieutenant Kishingbury, Eleventh Infantry, November 7; reached there November 19; from thence Company H, Fifth Infantry, proceeded to Fort Maginnis and Box Elder Creek, marching 306 miles; Companies B and E marched 165 miles.

November 12, 1880, Troop F, Second Cavalry, left Fort Ellis November 12; arrived at Fort Custer, Mont., November 22, 1880, and took station.

November 16, 1880, Company K, Fifth Infantry, left Fort Keogh en route to Fort Buford, as escort with public funds under charge of Major Baird, paymaster, U. S. A. Distance marched, 248 miles.

November 18, 1880, Company B, Fifth Infantry, returned to Fort Keogh from detached service at the Pinerias. Distance marched, 18 miles.

November 24, 1880, Company I, Fifth Infantry, on detached service in the field, left Camp McIntosh, en route to Fort Buford, for the purpose of escorting a detachment of recruits to Fort Keogh. Distance marched 163 miles.

November 25, 1880, Company D, Fifth Infantry, returned to Fort Keogh from detached service at the Pinerias. Distance marched, 18 miles.

November 26, 1880, Troop I, Seventh Cavalry, arrived at Fort Totten and took station.

November 27, 1880, Troop B, Seventh Cavalry, returned to Fort Yates from detached service in the field, Northern Pacific Railroad extension.

November 30, 1880, Company D, Eleventh Infantry, returned to Fort Abraham Lincoln from detached service in the field, Northern Pacific Railroad extension.

Changes of stations of troops during this month.

Troop F, Second Cavalry, from Fort Ellis to Fort Custer, Mont.

Company A, Eleventh Infantry, from Fort Sully to Camp Porter, Mont.

Company B, Seventeenth Infantry, from Fort Yates to Camp Porter, Mont.

December 3, 1880, Troop A, Second Cavalry, left its camp at the Pine-need and returned to Fort Keogh, arriving same day. Distance marched, 18 miles.

December 3, 1880, Company K, Fifth Infantry, escort with public stores, under charge of Major Baird, paymaster, U. S. A., returned to Fort Keogh. Distance marched during the month, about 84 miles.

December 3, 1880, Lieutenant Kishlingbury and detachment left their camp at the mouth of the Musselshell River and returned to Fort Custer, arriving December 7. Total distance traveled, 120 miles.

December 3, 1880, in compliance with Special Order 159, current series, Department of Dakota, Lieut. William English, Seventeenth Infantry, with a detachment of 12 enlisted men of Company F, Seventh Infantry, left Fort Abraham Lincoln with orders to report to the commanding officer, Cantonment Bad Lands, Dak.; arrived there December 4. On December 8, Lieutenant English, with 12 enlisted men of Companies D and F, Seventh Infantry, left the cantonment for Sentinel Butte station to guard government property and working parties on the Northern Pacific Railroad extension. The party was relieved December 23, by Lieutenant McCoy, Seventh Infantry, and 12 enlisted men of Companies D and F, Seventh Infantry.

December 6, 1880, Troops B and E, Second Cavalry, and Company H, Fifth Infantry, under command of Major Ilges, Fifth Infantry (in the field since November 12, 1880), left their camp near the mouth of the Musselshell River, Mont., December 6, 1880, and arrived at Fort Keogh December 13, 1880. Distance marched, 190 miles.

December 10, 1880, Company I, Fifth Infantry (part of Major Merrill's command in the field), left Camp McIntosh, Mont., November 24, 1880, and proceeded *en route* to Fort Buford, Dak., for the purpose of escorting a detachment of recruits thence to Fort Keogh, Mont.; left Fort Buford December 3, 1880, and returned to Fort Keogh, arriving December 10, 1880. Total distance marched, 330 miles.

December 14, 1880, in compliance with telegraphic instructions from department headquarters, dated December 12, 1880, 10 men from each of Companies A, B, and E, Seventh Infantry, under command of Lieutenant Woodbridge, Seventh Infantry, and escorted by Troop F, Seventh Cavalry, left Fort Buford and proceeded *en route* to Camp Poplar River to strengthen the garrison at that post, arriving there December 16. Troop F, Seventh Cavalry, was ordered to remain at the camp, per telegraphic instructions from department headquarters, dated December 18, 1880. Distance marched, 60 miles.

December 15, 1880, in compliance with telegraphic instructions from department headquarters, dated December 12, 1880, Companies A, B, C, F, and G, Fifth Infantry, and 6 enlisted Indian scouts, under command of Maj. Guido Ilges, Fifth Infantry, left Fort Keogh, *en route* to Camp Poplar River, Mont., to take temporary station there, for the purpose of strengthening the garrison at that post owing to the threatening attitude of hostile Indians in that vicinity; arrived there December 24, 1880. Distance estimated at from 135 to 175 miles.

December 23, 1880, Troop A, Second Cavalry, left Fort Keogh, Mont., and proceeded *en route* to Camp Poplar River, Mont., as escort, with rations and forage for the latter place. Camped at Ferry Point, Mont., December 31, 1880. Distance marched, about 60 miles.

January 1, 1881, Troop A, Second Cavalry, escorting public stores from Fort Keogh to Camp Poplar River, Mont., left camp at Ferry Point and

arrived at its destination January 19, 1881. Total distance marched about 135 miles.

January 2, 1881, Maj. Guido Ilges, Fifth Infantry, with Companies A, B, C, F, and G, Fifth Infantry, Troop F, Seventh Cavalry, and detachment Seventh Infantry, marched from Camp Poplar River, Mont., against a band of hostile Indians encamped about two miles to the southeast of the latter post, on the south bank of the Missouri River, and after an engagement, in which 8 of the hostiles were killed, compelled their surrender, capturing 305 Indians, about 200 ponies, 69 guns, and burning 60 of their lodges. On the 6th of January these Indians, together with 162 ponies, were sent from Camp Poplar River under guard (Troop F, Seventh Cavalry) to Fort Buford, arriving there January 10, 1881.

January 3, 1881, Major Ilges, Fifth Infantry, with Troop F, Seventh Cavalry, and battalion Fifth Infantry, left Camp Poplar River and proceeded towards the camp of the Yanktonai, on the Red Water, to compel the surrender of hostile Indians who fled to that camp after the capture of their village on the 2d instant. When about 7 miles on the way, Major Ilges was met by the Yankton chiefs, who promised that, if he would not take his command to their camp, the hostiles should surrender the next day. This was done. Distance marched, 14 miles.

January 8, 1881, Captain Ovenshine, Fifth Infantry, with Companies A and G, Fifth Infantry, left Camp Poplar River to scout up the Missouri River for hostiles reported in that locality. No Indians were seen and the command returned same day. Distance marched, 30 miles.

January 9, 1881, Lieutenant Woodruff, Fifth Infantry, with detachment Fifth Infantry, left Camp Poplar River to scout in an easterly direction, to search for and bring in a party of hostiles reported to be hidden in that direction. Returned same day with 18 hostiles captured. Distance traveled, 18 miles. These Indians, with 6 others who had, meanwhile, been arrested by Major Ilges, were forwarded January 11, under charge of Captain Dewees and his troop A, Second Cavalry, to Fort Buford arriving January 15, the troop returning to Camp Poplar River January 24.

January 14, 1881, troops H and I, Second Cavalry, and Companies C, D, E, and K, Eighteenth Infantry, under command of Captain Morris, Eighteenth Infantry, left Fort Assiniboine and proceeded *en route* to Milk River to intercept the retreat to Canada of Sitting Bull's band of hostile Indians. On the 21st of January, information having been received at department headquarters that Sitting Bull with about 300 of his band had secretly left the vicinity of the mouth of Milk River January 11, and was beyond reach across the Canadian border, orders were issued for the recall to Fort Assiniboine of the troops. The order reached Captain Morris January 24, at Medicine Lodge, on Milk River, and the command started on its return to Fort Assiniboine January 26.

January 31, camped on Milk River, one mile west of Morris Creek and 38 miles from Fort Assiniboine. Distance marched during the month, 220 miles.

January 23, 1881, Capt. S. Snyder, Fifth Infantry, with Company F, Fifth Infantry, with all available transportation, left Camp Poplar River for Wolf Point to assist a band of Indians under Crow King numbering about 300 (who had refused to go with Sitting Bull to Canada), on their journey to Fort Buford. Captain Snyder with his company returned to Camp Poplar River January 31, 1881.

January 27, 1881, First Lieutenant C. A. Booth, Seventh Infantry, left Camp Poplar River with detachment of Companies A, B, and E

seventh Infantry, which had formed part of Major Ilges' command at that post. Arrived at Fort Buford January 30.

January 28, 1881, troop M, Second Cavalry, left Fort Custer for the field on the Little Big Horn River, in charge of the materials for monument to be erected to the officers and men who fell in that battle.

February 1, 1881, Troop A, Second Cavalry, left Camp Poplar River for Fort Buford with 53 Indian prisoners of war. Arrived February 4. At Fort Buford February 10 and arrived at Fort Keogh February 19, 1881. Total distance marched, 230 miles.

February 4, 1881, Capt. O. B. Read, Eleventh Infantry, with detachment of Companies B and F, Eleventh Infantry, left Camp Poplar River as escort to 325 hostile Sioux Indians, under charge of Scout Allison, *en route* to surrender at Fort Buford. Arrived February 5. Indians surrendered February 6 with 150 ponies and 40 guns and pistols. Capt. Read with his detachment left Fort Buford February 6 and arrived at Camp Poplar River February 8, 1881. Distance marched, 120 miles.

February 2, 1881, Capt. R. L. Morris, Eighteenth Infantry, and command, which left Fort Assiniboune January 14, 1881, *en route* to Milk River to intercept the retreat to Canada of Sitting Bull and his band of hostile Indians, returned to Fort Assiniboune February 2. Total distance marched, 258 miles.

February 7, 1881, about 200 Crow Indian ponies were run off by Indians while grazing near Junction City, Mont. (at mouth of the Big Horn River.) The Crows started in pursuit, the trail leading towards the Musselshell River, and succeeded in recapturing about 70 of the ponies.

February 8, 1881, Troop C, Second Cavalry, left Fort Custer and marched to Terry's Landing to save the United States ferry-boat and save from being carried away by ice. Returned February 12. Distance marched, 60 miles.

February 12, 1881, Maj. Guido Ilges, Fifth Infantry, with Companies A, B, C, F, and G, Fifth Infantry, left Camp Poplar River *en route* to Fort Keogh via Fort Buford, with 161 Sioux Indian prisoners of war, 4 of whom were arrested in the Yanktonais camp. Arrived at Fort Buford February 15, 1881. Companies A and B were detached from the command for temporary duty at Fort Buford. Major Ilges, with the remaining companies C, F, and G left Fort Buford February 17 and arrived at Fort Keogh February 27, 1881. Total distance marched, 260 miles.

February 17, 1881, Troop G, Second Cavalry, left Fort Custer and proceeded along the Rock Creek road to Tongue River, for the purpose of building and repairing bridges along the route. Distance marched during the month, 80 miles.

March 1, 1881, Companies D and K, Fifth Infantry, left Fort Keogh for temporary duty at Fort Buford to relieve Companies A and B. Fifth Infantry, proceeded along the south bank of the Yellowstone to Powder River, but finding those rivers impassable by that route, the command, in compliance with telegraphic instructions from headquarters, Fort Keogh, returned to the latter post March 13. On the 22d the companies crossed the Yellowstone at Fort Keogh and took up the march to Fort Buford.

March 5, 1881, Troop G, Second Cavalry, returned to Fort Custer from detached service along the Rock Creek road to Tongue River, where they had been since February 17, 1881, building and repairing bridges. Total distance marched, 120 miles.

March 27, 1881, five hostile Sioux Indians surrendered to the commanding officer, Fort Keogh, Mont.

March 27, 1881, First Lieut. W. W. Robinson, jr., Seventh Cavalry, with 30 enlisted men of Troop F, Seventh Cavalry, Interpreter Henry and 3 Indian scouts, left Fort Buford for the Yanktonais camp on the Big Muddy to arrest any hostile Indians at that place. Returned to post next day having arrested 4 Indians. Distance traveled, about 60 miles.

March 29, 1881, First Lieut. W. W. Robinson, jr., Seventh Cavalry, with a detachment of 20 enlisted men of Troop F, Seventh Cavalry, and of Companies A and B, Fifth Infantry, an interpreter and 3 Indian scouts, left Fort Buford for the Yanktonais camp on the Big Muddy, it having been reported that more Indians were concealed at that place. Returned next day having arrested 9 Indians with 10 ponies and 3 lodges. Distance traveled, about 60 miles.

March 31, 1881, Second Lieut. F. D. Holton, Second Cavalry, with Troop I, Second Cavalry, left Fort Custer and proceeded to Wolf Point near Musselshell River to remove a government saw mill from that place to Fort Maginnis. Left camp on Spring Creek April 1 and arrived at Fort Maginnis April 18. Left Fort Maginnis April 21 and proceeded *en route* to Fort Custer. Encamped April 30 at Spring Creek, 20 miles from the post (Custer). Total distance marched, about 180 miles.

April 1, 1881, Company C, Eleventh Infantry, left Fort Custer for Old Fort Smith, Mont., to procure lime for the post. Distance marched, about 15 miles.

April 6, 1881, Sentinel Butte Station abandoned. Detachment of Company F, Seventh Infantry, left Cantonment Bad Lands April 13 and arrived at Fort A. Lincoln same date.

April 8, 1881, Company H, Eleventh Infantry, left Fort Custer for temporary duty at Terry's Landing on the Yellowstone River. Distance marched about 30 miles.

March 11, 1881, First Lieut. W. W. Robinson, jr., Seventh Cavalry, with detachment Troop F, Seventh Cavalry, arrived at Fort Buford escorting 135 hostile Sioux Indians, with arms and ponies, under Chief Low Dog who came in from Sitting Bull's camp. Indians surrendered to Major Brotherton same day.

April 15, 1881, Lieut. L. W. Miller, Fifth Infantry, with 10 enlisted men and 4 Indian scouts, left Fort Keogh on a scout north of the Yellowstone River. Returned April 22, having captured 4 lodges of hostile Sioux Indians, numbering 17, with 6 guns and 6 ponies.

April 16, 1881, Companies A and B, Fifth Infantry, left Fort Buford and returned to Fort Keogh, arriving April 24. Distance marched about 165 miles.

April 17, 1881, Companies D and K, Fifth Infantry, arrived at Fort Buford from Fort Keogh to take the place of Companies A and B, Fifth Infantry.

April 18, 1881, 156 hostile Uncapapa Sioux Indians surrendered at Fort Keogh with 57 ponies, 16 guns, and three revolvers.

April 21, 1881, Lieutenant Brett, Second Cavalry, with 12 enlisted men and 2 Indian scouts, proceeded to a point about 25 miles north of Terry Point to investigate the killing of 2 hunters at that point. Returned to post April 26 with report that all indications show the murder to have been committed by Blackfeet Indians.

April 21, 1881, in obedience to Special Orders No. 65, current series Department of Dakota, Company G, Eighteenth Infantry, left Fort

Shaw, Mont., *en route* to Carroll, Mont., to establish a summer camp at this point for the purpose of receiving and forwarding material, &c., for Fort Maginnis.

April 29, 1881, Troop B, Second Cavalry, and Company I, Fifth Infantry, left Fort Keogh to patrol the south bank of the Yellowstone River to protect working parties on the Northern Pacific Railroad and others.

May 2, 1881, Company C, Eighteenth Infantry, Capt. C. H. Potter, Eighteenth Infantry, commanding, left Fort Assiniboine for summer camp at Coal Banks, Mont. Arrived May 3. Distance, 39 miles.

May 2, 1881, Troops A and H, Seventh Cavalry, and Company D, Twenty fifth Infantry, Capt. F. W. Benteen, Seventh Cavalry, commanding, left Fort Meade, Dak., to scout in the vicinity of the Little Missouri River, and to protect working parties of the Northern Pacific Railroad and others. Relieved the last of June by Troops E and G, Seventh Cavalry, and Company A, Twenty fifth Infantry, Captain Hsley, commanding, from the same post.

May 4, 1881, Second Lieut. L. D. Greene, Seventh Infantry, with 35 enlisted men of Troop F, Seventh Cavalry, left Fort Buford to scout north of the post in search of a camp of hostile Indians reported in that direction. Returned May 7. Distance traveled, 105 miles.

May 7, 1881, Company F, Seventh Infantry, Capt. C. Williams, Seventh Infantry, left Fort A. Lincoln, on steamer Helena, for temporary duty at Fort Buford. Arrived May 14. Returned to Fort A. Lincoln June 21, 1881.

May 8, 1881, Troop K, Seventh Cavalry, Capt. E. G. Mathey, left Fort Totten for temporary duty at Fort Buford. Arrived May 24.

May 8, 1881, Company I, Eighteenth Infantry, First Lieut. C. B. Blau, Eighteenth Infantry, commanding, left Fort Shaw, Mont., to take station at Fort Maginnis, Mont. Arrived May 16, 1881.

May 14, 1881, Second Lieut. S. W. Miller, Fifth Infantry, with detachment of Fifth Infantry, left Fort Keogh as escort to Young Man-Afraid-Of-as Horses, returning to Pine Ridge agency.

May 14, 1881, Company F, Seventh Infantry, arrived at Fort Buford for temporary duty.

May 16, 1881, Troops A and B, Second Cavalry, Capt. T. B. Dewees, Second Cavalry, left Fort Keogh for Fort Maginnis, Mont. Arrived May 28.

May 16, 1881, Troop K, Second Cavalry, Capt. J. G. MacAdams, Second Cavalry, left Fort Ellis for Fort Maginnis, Mont. Arrived June 2.

May 21, 1881, Company G, Eighteenth Infantry, First Lieut. D. H. Boyd, left Fort Shaw for summer camp at Carroll, Mont. Left Carroll May 15 for Rocky Point. Arrived same date.

May 24, 1881, Troop K, Seventh Cavalry, arrived at Fort Buford for temporary duty.

May 25, 1881, First Lieut. S. M. Swigert, Second Cavalry, with a detachment of 25 men of Troop D, Second Cavalry, left Fort Ellis, Mont., for White Beaver Creek (called Charles Creek on some department maps), and established summer camp for protection against Indian depredations.

May 26, 1881, Capt. W. Clifford, Seventh Infantry, First Lieut. W. F. Robinson, jr., Seventh Cavalry, and Second Lieut. G. S. Young, Seventh Infantry, with detachment of 45 enlisted men, left Fort Buford, Dak., in charge of 1,114 Indian prisoners of war for Fort Yates, Dak., on the steamers Sherman, Helena, and Far West. Arrived May 29, 1881.

May 31, 1881, Companies D and K, Fifth Infantry, left Fort Benton for their station Fort Keogh.

May 31, 1881, Fort Benton, Mont., discontinued as a military post and Company A, Third Infantry, left for Fort Shaw, Mont., on that date. Arrived June 6.

June 1, 1881, Troops C, G, and M, Second Cavalry, left Fort Custer, Mont., for temporary duty at Fort Keogh, Mont. Arrived June 6, 1881.

June 1, 1881, the headquarters of the department transferred from Saint Paul to reservation for Fort Snelling, Minn., where buildings have been completed for the use of department headquarters.

June 5, 1881, a detachment, consisting of 3 officers and 70 men of Troop H, Second Cavalry, and Company A, Eighteenth Infantry, Capt. M. E. O'Brien, Second Cavalry, commanding, left Fort Assumbone, Mont., to scout the country in the vicinity north of the Marias River, and towards the Sweet Grass Hills, to prevent the killing of cattle by Indians. Returned June 28. Distance marched, about 198 miles.

June 6, 1881, Company K, Third Infantry, and the mounted detachment at Fort Shaw, Capt. John H. Page, commanding, ordered to proceed to the old Blackfeet Indian Agency, Mont., and camp in that vicinity for a few days, after which the command to move to Dry Fork Depmyer (De Ruover on some maps) Creek, and to establish a camp to prevent agency or other Indians committing depredations. Camp established on Depouille Creek (De Ponne on map).

June 8, 1881, orders issued discontinuing the district of the Yellowstone.

June 8, 1881, Companies D and K, Fifth Infantry, joined Fort Keogh from detached service at Fort Buford, Dak.

June 13, 1881, Capt. S. Snyder, Fifth Infantry, with 5 officers and 100 enlisted men, left Fort Keogh as guard on steamers—Eclipse, in charge of Captain Snyder; Josephine, in charge of Captain Owenshine; Helena, in charge of Captain Ewers; General Terry, in charge of Lieutenant Hargous; General Sherman, in charge of Lieutenant Avis, escorting 1,641 Indian prisoners of war to Fort Yates, Dak.

June 14, 1881, Capt. Mason Carter, Fifth Infantry, with his company, left Fort Keogh, Mont., to escort 69 Indian prisoners of war and 53 ponies overland to Fort Yates. Arrived June 30.

June 14, 1881, Troops C, M, and G, Second Cavalry, Capt. E. J. Spaulding, commanding, relieved from detached service at Fort Keogh, left to return to their station, Fort Custer, Mont. Troops C and M arrived June 17. Distance marched, about 210 miles.

June 16, 1881, Troop M, Second Cavalry, *en route* to Fort Custer, ordered to return to Fort Keogh, Mont., for temporary duty, and Troop I, Second Cavalry, ordered from Fort Custer to Fort Keogh for escort duty.

June 18, 1881, Second Lieutenant Holton, Second Cavalry, with 4 men of Troop I, Second Cavalry, left Fort Custer, Mont., for Fort Keogh to escort government transportation thence to Fort Magnums. Returned to Fort Custer July 18, 1881. Distance marched, about 580 miles.

June 22, 1881, 403 Indian prisoners of war remaining at Fort Keogh, 99 men, 162 women, 54 boys, 88 girls, all Northern Cheyennes; chief Roman Nose, Two Moons, Little Wolf, and Dull Knife. No Sioux Indians remaining at Fort Keogh.

June 24, 1881, Company F, Seventh Infantry (Williams'), arrived at Fort Lincoln from detached service at Fort Buford, Dak.

June 24, 1881, Companies G and K, Eleventh Infantry, Lieut. L. A. Matile, commanding, left Fort Sully, Dak., for East Pierre, Dak., to pro

scout to Bad Lands, Dak. Returned July 31, 1881. Distance marched about 241 miles.

July 18, 1881, Second Lieut. H. J. Slocum, Seventh Cavalry, with small detachment of the Seventh Infantry, left Fort Buford, Dak., steamer C. K. Peck, to Coal Banks, Mont., for the protection of government stores. Returned to Buford July 26, 1881.

July 19, 1881, Sitting Bull and immediate followers surrendered to commanding officer, Fort Buford, numbering 187 men, women, and children.

July 25, 1881, Companies D and K, Fifth Infantry, Captain McDonough commanding, left Fort Keogh, Mont., for Camp Poplar River, to remove intruders from reservation under charge of agent Porter. Returned Fort Keogh September 20, 1881.

July 25, 1881, Captain Ewers, Fifth Infantry, left Fort Keogh, Mont., to proceed to the Rosebud Mountains, Mont., for the purpose of recovering strayed or stolen stock belonging to Cheyenne Indians encamped near Fort Keogh.

July 29, 1881, Captain Clifford, Seventh Infantry, with a guard of men, left Fort Buford, on steamer Sherman, to conduct Indian prisoners of war (Sitting Bull and people) to Fort Yates. Arrived August 1, 1881. Indians numbered 45 men, 67 women, and 73 children.

July 30, 1881, Troop C, Second Cavalry, returned to Fort Custer having completed, under the direction of Lieutenant Roe, Second Cavalry, the erection of the monument, prepared by the Quartermaster General of the Army, in memory of the officers and men who fell in the battle of the Little Big Horn June 25, 1876. The monument is located on the point of a hill, 6 feet from where the remains of General Custer were found. Great pains were taken in collecting all the remains from the battle field and interring them at the base of the monument. The monument has 261 names cut on the four faces of the two upper stones and bears this inscription on one face of the lower stone: "In memory of officers and soldiers who fell near this place fighting with the Seventh United States Cavalry against Sioux Indians, on the 25th and 26th June, A. D. 1876." The remains of Lieutenant Crittenden were buried where he fell, and the stone provided by his father was placed in position.

August 1, 1881, Second Lieut. W. E. P. French, Third Infantry, with five enlisted men, left Fort Ellis, Mont., to prevent intrusion and prevent all persons cutting hay, without proper permission, on the Indian reservation between Boulder and Benson's Landing, Mont.

August 1, 1881, Companies A and F, Fifth Infantry, Captain Snyder, Fifth Infantry, commanding, left Fort Keogh, Mont., to relieve Troop E, Second Cavalry, and Company I, Fifth Infantry, on Northern Pacific Railroad extension. The troops relieved returned to Fort Keogh, arriving August 1. Distance marched, about 35 miles.

August 8, 1881, Second Lieutenant Greene, Seventh Infantry, with small detachment, left Fort Buford, Dak., to stake out a telegraph line between Fort Buford and Camp Poplar River, Mont.

August 12, 1881, Second Lieutenant Wheeler, Eleventh Infantry, and detachment Company C, Eleventh Infantry, left Fort Custer, Mont., for guard duty at Terry's Landing, Mont.

August 12, 1881, Company H, Eleventh Infantry, First Lieutenant Mansfield, Eleventh Infantry, commanding, left Fort Custer for Fort Maginnis to assist in the construction of a telegraph line from that place to Camp Poplar River, Mont. Arrived at Fort Maginnis August 13, 1881.

August 16, 1881, the following changes in the mail routes to Fort Buford, Dak., went into effect:

Arrivals: From Bismarck, Dak., via Glendive, Mont., Tuesdays, Thursdays, and Saturdays.

Departures: Mondays, Wednesdays, and Fridays.

The mail from the west has also been increased to three trips instead of one.

By these changes the time of transit from the east has been considerably reduced, so that letters from department headquarters reach Fort Buford in five days instead of eight. The route is now by Northern Pacific Railroad to Glendive, thence by stage 75 miles. Time occupied by stage, one day and a half.

August 16, 1881, Company F, Eighteenth Infantry, Captain Lloyd commanding, left Fort Assiniboine, Mont., for Summer Camp at Rocky Point, Mont., to aid in the construction of a telegraph line between Camp Poplar River, Mont., and Fort Magnums, Mont.

August 18, 1881, First Lieutenant Kingsbury, Second Cavalry, with a detachment of 20 enlisted men of Troop B, Second Cavalry, left Fort Magnums, Mont., to select a route for a telegraph line between Rocky Point and Camp Poplar River, Mont. Returned to Fort Magnums about September 15, after examining the route on both sides of the Missouri River.

August 20, 1881, Troops H and L, Second Cavalry, and Company D, Eighteenth Infantry, Captain O'Brien, Second Cavalry, commanding, with 5 officers and one 3 inch rifle, left Fort Assiniboine, Mont., to prevent Canadian Indians from driving off buffalo from United States territory, and to remove intruders from the Indian reservation. Recalled, and arrived at the post September 10, 1881.

August 20, 1881, Companies B, E, and K, Eighteenth Infantry, numbering 4 officers and 71 enlisted men, under command of First Lieutenant Miller, Eighteenth Infantry, left Fort Assiniboine, Mont., to re-enforce Captain O'Brien's command.

August 22, 1881, First Lieut. C. A. Booth, Seventh Infantry, with a detachment of 20 men, commenced building the telegraph line between Fort Buford, Dak., and Camp Poplar River, Mont.

August 24, 1881, Sergeant Neeland, with 19 men of the garrison at Camp Poplar River, left that post to work on telegraph line between Camp Poplar River and Fort Buford, Dak.

August 29, 1881, Company C, Seventh Infantry, Capt. D. W. Benjamin, Seventh Infantry, commanding, left Fort Snelling, Minn., for Green Bay Indian agency at Keshena, Wis., to assist the United States Indian agent in quelling the disturbance among the Indians at that agency and arresting the disturbers. Second Lieut. J. B. Jackson, Seventh Infantry, accompanied the command.

August 29, 1881, Companies C and G, Fifth Infantry, under command of Captain Owenshine, left Fort Keogh, Mont., to proceed to Camp Garland and relieve Companies A and F, Fifth Infantry.

September 9, 1881, Company G, Seventeenth Infantry, Second Lieutenant English, Seventeenth Infantry, commanding, left Fort A. Lincoln for Fort Yates. Returned to Fort A. Lincoln.

September 10, 1881, steamer Sherman, with Sitting Bull and his immediate followers, numbering 172, left Fort Yates for Fort Randall.

September 17, 1881, Sitting Bull, with his immediate followers, arrived at Fort Randall, Dak.

September 19, 1881, United States military telegraph line completed

from Fort Buford to Camp Poplar River. The line from Fort Maginn to Summer Camp at Rocky Point now under construction.

Some of the matters referred to in the foregoing abstract require more ample notice. Of these the principal ones are the operations which brought to a final termination the hostilities with the Sioux, which commencing in spring of 1876, continued with greater or less activity and with varying success during the intervening years of 1877, 1878, 1879, and 1880, into the early part of 1881.

My annual reports for the last five years contain a history of the hostilities, and it is unnecessary to do more than to refer to them now.

It will be recollected that at the date of my last report, notwithstanding the fact that large numbers of the hostile Indians had from time to time surrendered at Fort Keogh, a considerable body of them under the leadership of Sitting Bull remained in the northwestern British provinces, just beyond the boundary line, and constituted a constant menace to the peace of the border. Their number was sufficiently great to make them formidable, if not to our troops, at least to the settlers in Northern Montana and in the Valley of the Yellowstone, and to the flocks and herds. Moreover, their attitude and position offered a great temptation to the dissatisfied and turbulent among the agency Indians of their nation to break loose from the control to which they are obliged to submit at their agencies, and to return to a wandering and predatory life. It was therefore extremely desirable that they should be brought into subjection in some manner. Though parties of them were frequently on our side of the line, it was nearly useless to send troops in pursuit of them, for their safe refuge on foreign territory was always so close at hand that their escape to it was all but certain.

Under these circumstances, in September, 1880, Maj. D. H. Brotherton, of the Seventh Infantry, commanding at Fort Buford, reported that the interpreter employed at his post, Mr. E. H. Allison, possessed great influence with the hostile Sioux, and could go among them with safety, and he suggested that Allison should put himself in communication with Sitting Bull and other chiefs, and endeavor to induce them to return to this country and surrender upon the terms upon which other bands of the hostile Sioux had surrendered.

Authority to send out Allison for this purpose was given, and he made several visits to those of the hostile Indians who were accessible to him. Protracted negotiations followed, and frequent promises to return and surrender were made by the Indians, but many excuses and delay were made, and the specific promises made were broken as often as they were made.

In the mean time, upon the application of the Indian agent at the Poplar River agency for military protection, two companies of the Eleventh Infantry, under command of Capt. O. B. Read, of that regiment, were sent to that place with orders to establish a cantonment. The companies reached their destination on the 12th of October. They immediately commenced the construction of huts for shelter during the winter that was to follow.

As a consequence of Allison's negotiations, numerous parties of hostile Indians arrived at Poplar River during the month of November and the early part of December, until, finally, a considerable body of them had collected. When they first arrived they professed the most peaceable sentiments, and announced their intention to proceed to Fort Buford and surrender to the commanding officer of that post, but their numbers were increased by successive arrivals they became turbulent and arrogant; they no longer held out promises to surrender; they

even assumed a threatening attitude towards the garrison. Under these circumstances it became necessary to re-enforce the troops at the post. Therefore Captain Bell, Seventh Cavalry, with his own company and thirty men from the companies of the Seventh Infantry at Fort Buford, was sent from that post to Poplar River, and Major Ilges, with five companies of the Fifth Infantry, was sent to the same place from Fort Keogh.

Captain Bell arrived on the 15th, Major Ilges on the 24th of December. Major Ilges immediately assumed command.

The history of the events which followed can be best narrated in his own words. I therefore quote the following reports from him at length

HEADQUARTERS CAMP POPLAR CREEK, MONT.,
January 31, 1881.

SIR: I have the honor to submit herewith the following report of the movements of the battalion Fifth Infantry from Fort Keogh, and the operations of the troops of this camp since I assumed command of the same.

I left Fort Keogh, Mont., December 15, 1880, in obedience to special instructions, dated Headquarters Fort Keogh, Mont., December 13, 1880. The command was supplied with 300 rounds of ammunition per man, and 10 days' rations and forage.

The battalion consisted of Companies A, B, C, F, and G, Fifth Infantry, accompanied by Acting Assistant Surgeon W. E. Sabin as medical officer, and under command of Maj. Guido Ilges, Fifth Infantry (171 enlisted men, 8 commissioned officers, 1 acting assistant surgeon, 6 enlisted Indian scouts, and 24 citizen teamsters—officers, enlisted men, and scouts, mounted). The column was directed to move by the most direct route to Poplar River Agency, and there take post, temporarily. Before departure from Fort Keogh, I received telegraphic instructions informing me that the object of the expedition was to strengthen the garrison at Camp Poplar River, and directing me not to seek an encounter with the Indians on the route here. I reached this point on the evening of the 24th ultimo, with men and animals in fair condition. There were many cases of frost-bites among officers and enlisted men, but none went on sick report. Nearly all the animals were suffering from epizootic, but have since then entirely recovered.

The march lasted nine days, the distance traveled 192 miles, through deep snow, with the thermometer ranging from 10° to 35° below zero. The route was nearly the same as that traveled by me in September last, while in command of the battalion of the Eleventh Infantry, *en route* to this camp, a full description of which was forwarded to your office under date of October 14, 1880, by Captain Beach, Eleventh Infantry, my successor in command.

The battalion Fifth Infantry upon arrival here encamped on the high plateau lining Poplar River, and to the west of the cantonment proper.

The camp of the hostile Sioux was plainly visible on the opposite shore of the Missouri River, situated in a heavy growth of cottonwood timber filled with thick underbrush, and in an elbow formed by the river, the angle of which to the southeast of this post. Distance from post to Indian camp about two miles.

It was reported to me that these hostiles numbered about 400 souls, among whom nearly 100 warriors living in the same number of tepees.

On the morning of the 25th day of December last the chief Gall asked for an interview, and therein stated that he was ready to surrender to me individually; that his people, however, were not ready to surrender until spring, and that then they would elect whether or not they would remain at this agency, or go to Forts Keogh or Buford.

Gall stated that he in person desired to visit Buford and demanded transportation and an escort for this purpose. Being without any special instructions at that time, I declined to consent to Gall's demand, but plainly told him, and about 60 warriors present during the talk, that they would have to go to Buford without delay; gave them three days for deliberation, at the expiration of which time I intimated that an answer was wanted.

After this talk the chief The Crow requested an interview, and in the presence of about 12 of the headmen of this camp stated that they wanted to await the action of Sitting Bull, who was their only chief, and that he and his followers were ready and willing to do whatever their chieftain advised. Whilst thus engaged in council, your dispatches, sent out to reach me *en route*, and which had missed me, were handed me by courier, and as they forbid any intercourse whatever with the hostiles on my part, I advised The Crow to give good counsel to his people and to go to Buford. I appealed to him to do what was best for his people, who were wanting for food and clothing,

and who would be relieved of their suffering by accepting the kind offers of the commanding officer of Fort Buford.

On the morning of the 31st of December last, being then in possession of your telegram of the 28th (same month), informing me that the former instructions given the department commander were revoked and authorizing me "to compel the surrender of The Gail and his people by such means as to me may seem best adapted to that end," I sent for Gail, The Crow, and all the headmen of the hostile camp. They met me, about 60 in number, fully armed, at the agency building, and in presence of my officers and the United States Indian agent, Mr. Porter. Scout Allison, with two emissaries of Sitting Bull, on return trip from Fort Buford, were invited to present, and upon my request, Crow King, the head soldier, gave the hostiles a description of his visit to Fort Buford; the good words that had been spoken there to him, and he advised them to go there at once; that such was the wish of Sitting Bull for whom he was a trig and speaking. I then insisted that The Gail and The Crow should get their people ready to move to Fort Buford on the morning of the 2d instant, promising them assistance in rations and transportation. They did not decline to ultimately, but said it was too cold to travel at that time, and The Crow brought the interview abruptly by telling me I had said enough to him. They fully understood my demand for removal on the 2d instant, and also, that I would move against them on that day to compel surrender with force in case of refusal on their part. In the evening of the 1st instant, The Crow went to the house of my interpreter, Joe Culbertson, and sent me message "that he and his people would not move in spring; that he was tired of talking with me; that the soldiers were cowards, afraid to fight; that they cried in winter and could not handle a gun; and that if I attempted to interfere with his people, there would be trouble; that he was ready to fight me if I wanted fight." The Gail, later in the evening of same day, advised Henderson, the post trader, and his employés, to leave the agency at once, as he did not want to see them killed. He said, "You people have been kind to me in the past, and I do not want to hurt you. To-morrow we will fight and we will kill everybody at the soldier camp."

It then occurred to me most forcibly that further delay in bringing these hostiles to terms should cease, and that action against them should be prompt and decisive. I had from my own observation and through the knowledge of officers and scouts obtained a very accurate description of their camping ground, and it will be seen from the accompanying map, drawn by First Lieut. J. M. Woodruff, Fifth Infantry, that the field offered superior advantages to me for the surrounding of villages, with good shelter for my command during the expected engagement.

On the morning of the 2d instant I completed my arrangements, leaving a few enlisted men of each company, and the entire number of men of Company B, Eleventh Infantry, under command of First Lieut. C. F. Roe, Eleventh Infantry, behind for protection of the camp and agency.

At 11 o'clock a. m. I directed Capt. O. B. Read, Eleventh Infantry, with Company F, Eleventh Infantry (29 enlisted men), and detachments of Companies A, B, and Seventh Infantry, under the immediate command of First Lieut. Charles A. Beal, Seventh Infantry (28 enlisted men), to proceed and take position, about 3 miles below my camp, and to the east of the hostile villages, separated from the latter by the Missouri River. A 3-inch Rodman gun accompanied this command, and was served in the direction of Lieutenant Booth. During the engagement which took place in the day, one shot was fired from this gun at the villages, after which I brought across the river and placed it in position with the main command, and in immediate vicinity of the largest village.

At 12 o'clock m. I started with the main column in a southerly direction from camp, trying my march so as to strike the village simultaneously with the detachment under Captain Read. My command consisted of the battalion of the Fifth Infantry as follows: Company A, Second Lieut. P. S. Ayer; Company B, First Lieut. T. M. Woodruff, and Second Lieut. J. M. T. Partello; Company C, First Lieut. C. P. Hargis, and Second Lieut. C. A. Churchill; Company F, Capt. Simon Snyder; Company G, Capt. S. Overshine; also Company E, Seventh Cavalry, Capt. J. M. Bell (70 enlisted men), 1 enlisted scout, Joe Culbertson, 6 Indian scouts from Fort Keogh. Most of the agency Indian police, 3 Yanktonais volunteers, 1 citizen volunteer (Mr. S. Culbertson); 1 citizen volunteer (Mr. Chas. S. Duhl). During the march firing, Second Lieut. C. A. Churchill took temporary command of Company B, Fifth Infantry. Second Lieut. J. M. T. Partello, Fifth Infantry, and Dr. Sahlin accompanied the expedition, the former as adjutant and the latter as medical officer.

The entire command was mounted, and numbered 12 commissioned officers, 273 enlisted men, 10 Indian scouts and volunteers and 2 citizen volunteers. I took with the column the Hotchkiss gun, which, during the engagement, was handled and served with great skill and coolness by First Lieut. T. M. Woodruff, Fifth Infantry, personally, and his gunners.

After crossing the Missouri and filing slowly through a slough fringed by a thicket

growth of willows, I came upon the first village, that of Minneconpous, 32 lodges, with the exception of a few supernumerated bucks, was entirely deserted. These were hanging from the woods towards me and deposited a few worthless muskets on the ground. I directed Captain Owenshire, Fifth Infantry, with his company, to search the place for Indians and fire-arms, which search resulted in the finding of 16 rifles of different patterns, and two pistols. These arms were burned by that officer.

After forcing Captain Owenshire with Company A, Fifth Infantry commanded by Lieutenant Ayres, and instructing him to continue the search and drive the Indians away from their tepees, preparatory to removal to my camp, I proceeded with the main command in an easterly direction, and soon struck the main camp of the Lacapapas, about forty lodges, reported as Gall's followers. Here perfect silence reigned, and not an Indian could be seen. I then directed Lieutenant Woodruff to place the batteries in position, and to send a few shells into the woods for the purpose of convincing the hostiles gathered in timber to the rear that I was in earnest. At the first shot an Indian was seen to leave one of the tepees, leisurely walking towards rear away from us. I then placed my column, by the flank to the front of the village, and commanded commanding officers to reserve fire until further orders.

Captain Hargons, with Company C, Fifth Infantry, the center company of the battalion, was ordered to advance upon the village and search the same for Indians and arms. This was executed with promptness, and, while advancing, a shot was fired from one of the tepees at the soldiers, and they returned fire, killing one buck and wounding two other Indians, one of whom afterwards proved to be a squaw. While this company was thus engaged, the balance of command was held in readiness for immediate action.

About this time, Captain Read, Eleventh Infantry, with his footmen, who had previously crossed the Missouri, emerged from the woods on my right, and there took position. I directed him to open fire upon a number of bucks who were seen running from the rear of the right village towards the agency, and across the Missouri. They soon dropped out of sight among the willows. What execution was done among them is not known.

Returning to the point of Captain Hargons' operations, I stopped the firing and sent Scout Joe Culbertson into the timber, who called out to the Indians to come out and surrender, but there was no reply, excepting an occasional yell of suffering and defiance.

I then directed the destruction of the tepees and the sending of some more shells into the woods. Soon after Scout Culbertson, who, with some Indian scouts, had been skulking around the right flank of the woods containing the Indians, informed me of the display of a white flag. I immediately directed the firing to cease.

I, in person, went with the scouts to the spot where the white flag was flying, in a clearing of about 75 yards square, and in front of the eastern flank of the village. Though repeatedly told to do so by my scouts, the Indians would not emerge from the woods and surrender. I then moved the two field guns into this clearing, and announced through the interpreter that I would give them ten minutes' time for surrender, after which, in case of non-compliance, I would fire upon them again. A few moments after the tepees were taken down, and the warriors came out of the timber in small successions, depositing their guns on the ground in front of me. Soon after they were seen driving their baggage across the Missouri towards my camp.

I then detached Captain Bell, with his company, F, Seventh Cavalry, to secure the prisoners. He rode about 15 miles, and brought to my camp late in the evening, over 200 prisoners. All the tepees which the Indians refused to take down were burned. The night was coming on, and it was feared that the owners thereof would escape with them during the following night. It seemed to me the only course left to command their surrender, and this proved to be correct, as on the following day the prisoners were taken to my camp numbered, by actual count, over 400, and only 31 lodges and 100 men.

I am glad to report no casualties to soldiers or scouts.

It is now known that at least 8 of the hostiles were killed during, or died of wounds since the engagement, although this was not known at the time of my telegraphic report to your office.

I think that about 60 of the hostiles escaped during and after the engagement, some of whom have joined Sitting Bull's followers. Forty-three guns and pistols were destroyed or lost, and 2 left in my possession, some of which have been given as reward to my friendly Indian warriors, who assisted me during the expedition with great fidelity. I have also given to them and the other scouts about 40 of the captured ponies, and trust that my action will be approved.

I cannot speak too highly of the coolness and gallantry with which the officers and men of my command went to the scene of action and proceeded to their duty with the expectation of a severe encounter with these savage people, who were supposed to defend their stronghold to the last.

Where all did so well I cannot discriminate in favor of one, but recommend all to the favorable consideration of the authorities. They are good soldiers, and I congratulate myself to have been their commanding officer during this campaign, which has now lasted nearly seven weeks. They have undergone hardships which heretofore were thought almost insurmountable, when the snow is knee deep and thermometer from 15 to 30 below zero.

In addition to the foregoing, I desire to say that Messrs Joseph S. Culbertson, Saint Paul, and Charles S. Ditch, of Chicago, the two citizen volunteers, and all Indian guides and scouts behaved gallantly, and were of help to me.

On the morning of the 3d instant I proceeded, with battalion of Fifth Infantry Company F, Seventh Cavalry, also field guns and ambulance, towards the Yankton camp, located on Red Water, and distant about 15 miles from here, for the purpose of compelling the surrender of those hostiles, who were reported as having the flat camp for protection. When about 7 miles on my way the chiefs Medicine Bear and Skin of the Heart met me with a number of Yankton warriors, and begged me to return and not enter their camp, as they feared trouble. They said they did not want any fight with the soldiers, as they were not prepared for it. I answered them that my intention towards them was friendly, but that the hostiles must be turned over to me.

Major Porter, the United States Indian agent, who was present with my column, interceded in behalf of the wishes of these Indians, who promised to surrender hostiles to me on the following day, which promise they carried out to a greater extent than I had any reason to expect. I did not go to their camp, but returned to my post.

On the morning of the 5th instant Capt. S. Owenslane, in command of Companies A and B, Fifth Infantry (the latter in charge of Lieutenant Avis), and accompanied by Scouts Culbertson and Caldwell, proceeded on a scouting expedition along the north side of and up the Missouri River, with instructions to search for the trail of those reported to be fleeing in that direction. The column returned same evening, having traveled about 30 miles. No Indians were encountered and no trail of such escape parties could be located with any certainty.

On the morning of the 9th instant First Lieutenant Woodruff, Fifth Infantry, with 20 enlisted men of his company, B, and accompanied by Acting Assistant Surgeon S. Black, proceeded on scouting expedition in easterly direction, with instructions to search for and bring in a party of hostiles reported to be hidden in that direction. The detachment returned to camp same evening, having traveled about 40 miles, bringing in 18 hostiles, among them 4 bucks, nearly all of them badly frozen and debilitated, and all of them in the most destitute condition.

The prisoners taken in the engagement of the 2d instant, 305 in number, together with 162 ponies, were sent under guard (Company F, Seventh Cavalry, commanded by Capt. J. T. Bell) to Fort Buford. They left this post on the 6th, reaching latter place on the 10th. Rations and transportation were furnished them by me.

The hostiles whom Lieutenant Woodruff had brought in, together with 6 other warriors whom I had meanwhile arrested, were forwarded to Fort Buford under charge of Capt. T. B. Dewees, Second Cavalry, on the 11th instant, he having arrived at that post on the 8th instant with his company and in charge of supply train.

Owing to the very implicit instructions imposed upon me relating to non-interference on my part with Sitting Bull's camp, on Milk River, and about 50 miles distant from here, my command has remained in camp since then, with the following exceptions:

On the morning of the 17th instant I was informed by courier from Scout Allison who had meanwhile proceeded to the vicinity of Sitting Bull's camp, that the latter with 43 lodges had escaped across the lines, taking his leave on Milk River, on the 11th instant, also that the balance of his followers, 51 lodges, under the leadership of Crow King, were making their way to Wolf Point *en route* to Fort Buford, for the purpose of surrendering to the commanding officer of that post.

Accompanied by First Lieutenant Woodruff and two enlisted men of the Fifth Infantry, I started on the 18th instant for Wolf Point, arriving there same evening. Here I ascertained that Allison with his Indians was still 25 miles distant and unable to move beyond a few miles daily by reason of scarcity of food and horses. As the prompt transport of these people to Buford seemed to me of the utmost importance I purchased some articles of subsistence for them, and forwarded them in small quantities to their camp, from time to time. I returned to this post on the 19th instant, and forwarded on the 23d instant, Capt. S. Snyder, Fifth Infantry, with his company, I, and all available transportation to Wolf Point, for the purpose of assisting these Indians on their journey downward. This transportation proceeded 15 miles beyond Wolf Point, and the band was brought into this camp the way to Buford that day. They are being conducted from here to the latter place by Captain Read, with detachment of his company, F, Eleventh Infantry, who is in charge of the transportation and rations while *en route*. The band consists of 51 lodges.

over 300 people, among whom about 70 or 80 full-grown warriors, with about 200 horses. They will reach Buford by the 5th instant.

On the 29th instant, Iron Dog, with 8 lodges, 64 people among them, 10 full-grown warriors, surrendered to me, with 5 guns and 13 ponies. They came direct from Woody Mountain and down Poplar Creek. They report no game across the line, and the Canadian authorities unwilling to support them. They say that the commanding officer of the mounted police force advised them to go to me and surrender. These people are in a most pitiable condition for want of food and clothing, they having eaten nearly all their ponies on the journey. They will leave to-day under charge of Captain Dewees, Second Cavalry, who, with his company, A, returned from Buford to this post on the 23d instant. All my available transportation and some hired citizen teams go with these bands.

In addition, I respectfully state that on the 22d instant I sent Scout Joë Culbertson with ten of the enlisted Indian scouts to take up the trail of Sitting Bull and his followers on the Porcupine, and to follow the same to the line, so as to obtain absolute knowledge of the fact that he has again entered Canadian territory.

As already stated in my dispatches, I believe that by a march to the line with my column, and the assistance of the officer in charge of the mounted police force of Canada, the surrender of Sitting Bull can yet be accomplished.

I am, very respectfully, your obedient servant,

GUIDO ILGES,

Major Fifth Infantry, Commanding Post.

ASSISTANT ADJUTANT-GENERAL,

Department of Dakota, Saint Paul, Minn.

HEADQUARTERS CAMP POPLAR RIVER, MONT., *February 12, 1881.*

SIR: I have the honor to submit herewith the following report of the operations of this command, since the date of my last report of January 31, 1881, and up to this date, when my command (battalion of Fifth Infantry) leaves for Fort Keogh, Mont., its proper station.

The 64 Indian prisoners, under charge of Capt. T. B. Dewees, with Company A, Second Cavalry, left for Buford on the morning of the 1st instant, and arrived at the latter post on the 4th instant, delivering only 53 prisoners. The discrepancy in numbers forwarded and received will be accounted for in the latter part of my report; and I will only add that the two families which left the camp surreptitiously are now going to Buford under guard.

The 325 Indian prisoners, under Crow King, accompanied by Scout Allison, and under charge of Capt. O. B. Read, Eleventh Infantry, with detachment of Company F, Eleventh Infantry, left for Buford on the morning of the 1st instant, and arrived at the latter post on the 5th instant.

On the 7th instant I applied to Major Porter, United States Indian agent, for the arrest of Little Assinniboine, then at Wolf Point. He, although a born Assinniboine, has all his life lived with Sitting Bull's camp, having been captured by him when a little child. He is Sitting Bull's chief adviser; never lived with Assinniboines, and was casually sojourning at Wolf Point for spying purposes upon my movements. The arrest was quietly effected on the following day, and this noted warrior and murderer is now in my guard-house, secured by shackles. I have also his three horses, his gun, and his family; and I trust he will not be turned loose again to join Sitting Bull's camp to do deeds of depredation and murder upon the country, but be kept with the people with whom he has lived since his childhood, and certainly most of the time from choice. He is a noted desperate character, and a fit subject for Leavenworth prison; so is the Yankton warrior, Black Horn, whom I sent to Fort Buford in irons, and who was released by Major Brotherton, Seventh Infantry, commanding Fort Buford, upon the ground that this Indian is not a hostile Sioux. I inclose herewith three affidavits, marked respectively A, B, and C, relating to this Indian, fully showing the necessity of securing his permanent absence from this agency, and I earnestly request that he be kept at Fort Buford, under close guard, until he can be removed to some safe place where he must stay. He will be taken by me to Buford and turned over to commanding officer of that post for his action.

On the 7th instant, I received your telegram directing me to return with my battalion, Fifth Infantry, to Fort Keogh, as soon as work on hand was finished.

On the 8th instant, I commenced the arrest of the hostile Sioux Indians who were hiding in the camps of the Yauktonnais. Owing to the warm weather the tributaries of the Missouri, above, had broken up in ice and the water began running down the Missouri, which threatened the crossing. This assisted me in a great measure, as nearly the whole Yankton camp, together with these hostiles, crossed over to the agency where they are now encamped.

The result of the search of the 8th, 9th, and 10th instant, resulted in the capture of 185 hostiles, 42 of whom are full grown warriors, of 15 horses, and about 7 worthless guns. These Indians, except 35, I have under guard, and they started this morning

for Fort Buford with my column. I have to use wagons for their transport, and issue rations to them. We will probably arrive at Buford on the 15th instant.

The Yanktonnais were at first disposed to object to my visit with military force to their camp, but they have since submitted with grace to the inevitable. I will give the head chiefs a few rations as a reward for their assistance to me, which has really been valuable during my stay here, and the transaction of the business on hand.

To Major Porter, United States Indian agent at this point, much praise and recognition are due by me for his able assistance in many ways, both in connection with supplying me with material and guides. Upon his urgent request, I have, yesterday, released about 35 hostiles who had for many years lived with his agency Indians, and who hold tickets from him. They are not a discordant element, and their presence here will not endanger the interests of the service.

During the night of the 9th instant, the Missouri rose beyond all proportions of former knowledge or recollection of oldest inhabitants. The whole valley, perhaps 3 miles wide, is now submerged in from 3 to 15 feet of water, which runs by the agency buildings within 15 yards of the same. Many hundreds of horses of the Indians have been drowned, and it is feared that many lives were lost, as it is known that several families of Indians, few of them hostiles, had failed to leave the timber and come to the agency. On the evening when the waters rose, cries of people in distress could be heard, and some of them were reported to be clinging to the branches of the trees lining the Missouri, and about 14 miles distant from here. Without boats nothing could be done, but it is hoped that the water will subside in time to bring succor to the endangered people before they succumb to hunger and cold. The agent will do all he can for them.

Owing to the unexpected and sudden rise of the Missouri and the overflow of the bottom lands through which the road to Buford leads, my march to the latter post was postponed from the 9th to this date. I will have to find my own road, and have hired the only man in the country who can guide me, whom I will have to pay a compensation of \$50 for the trip.

I inadvertently neglected in my report of the 31st of January last, describing the engagement of the 2d of that month, to mention Second Lieut R. J. C. Irvine, Eleventh Infantry, who accompanied the command of Capt O. B. Read, Eleventh Infantry, and whose conduct was in keeping with that of the other officers and worthy of the highest praise.

During my administration of affairs at this post, it has become necessary to incur many expenses and issue many rations, but, as I have striven to pursue the most economical way while pursuing the one great object marked out for me, in which pursuit I have been somewhat successful, I trust that my action, which could in no instance be submitted for the previous approval of the department commander, may be approved.

Very respectfully, your obedient servant,

GUIDO ILGES

Major Fifth Infantry, Commanding Post

Maj. SAMUEL BRECK,

Assistant Adjutant-General, Department of Dakota, Saint Paul, Minn.

About the 11th of December, Sitting Bull, with whom negotiations had been kept up through the interpreter, Allison, crossed the boundary with the main body of his adherents and with the avowed purpose of surrendering at Fort Buford. He proceeded to the mouth of the Milk River and established his camp. Finding game in that vicinity his people engaged in hunting. From this point he sent a number of his chiefs and soldiers to Buford to continue his negotiations for surrender and to make various excuses for not coming in at once. These Indians arrived at Buford on the 24th of December. The principal reason given by them for not surrendering immediately was that the Indians collected at Poplar River were very averse to a surrender, as were a portion of those who were at the Milk River, and that should the two camps unite those who were averse would form a majority of the whole. They desired that the camp at Poplar River should be gotten out of the way so that "the road might be clear" for them. It was the opinion of Allison that should measures be taken to capture or to compel the surrender of the Poplar River camp no evil effect would be produced upon the minds of the Indians at Milk River; that they would understand

that such action was taken in consequence of their desire that the way should be cleared for them.

It was in consequence of these representations that Major Ilges was directed to take efficient measures to enforce a surrender.

After Major Ilges's action on the 2d of January, Sitting Bull remained for a time at the mouth of the Milk River, still promising to come to Fort Buford, but as the time passed it became very doubtful whether he would fulfill his promises, and consequently it seemed desirable to interpose a force between him and the boundary, so that his retreat might be intercepted should he attempt to make one. Therefore, on the 11th of January Col. T. H. Ruger, Eighteenth Infantry, commanding the district of Montana, was directed to send two companies of the Second Cavalry with a detachment of the Eighteenth Infantry, sufficient to make the whole force 200 men from Fort Assinniboine, down the Milk River to plant themselves between the Indian camp and the boundary. This force left Assinniboine on the 13th of January. On the 22d of January it reached Medicine Lodge, at the lower end of the Big Bend of the Milk River. At this point orders were received to suspend the march. On January 24 orders were received to return to Assinniboine. These orders were given in consequence of the reception at these headquarters of intelligence that Sitting Bull with a portion of his people had already made his escape across the frontiers. It seems that after the capture of the Indians, at Poplar River, the division of sentiment in the camp at Milk River became more marked, the majority of the people there still wishing to surrender, but a large minority desiring to return to the British provinces. This division culminated in the middle of January in the retreat of Sitting Bull with forty lodges, leaving behind him about sixty lodges under the leadership of Crow King. These latter immediately began to move towards Fort Buford, but their progress was very slow; they were nearly destitute of food, they had but few horses, they were half naked, and the cold was excessive. Every effort was made by Major Ilges to relieve their necessities; rations were sent to them, and all the horses and wagons which could be spared for the purpose were sent out for the conveyance of the women and children. They numbered 325 souls. Finally these Indians as well as those captured at Poplar River, were safely conveyed to Buford. They arrived in a deplorable condition, but Major Brotherton made the most strenuous exertion to prevent further suffering. Shelter, food, fuel, and clothing were supplied to them, the latter being procured under authority given by the Interior Department to make purchases of clothing not to exceed in value \$5 per person. Subsequently several small parties were captured or surrendered, so that on the 26th of May there were at Fort Buford 1,125 Indian prisoners of war. On that day they were placed upon steamers and carried to Fort Yates.

By successive surrenders and captures during the year 1879 and 1880 there had been assembled at Fort Keogh more than 1,600 of the hostile Sioux. Orders were issued to send them to Fort Yates also. A small party of them was sent overland under a suitable escort, and in charge of the horses, which they and the other members of their bands had been permitted to retain, and of a considerable number of cattle, which had been purchased for them. The great body of them was shipped on steamers and carried down the Yellowstone and Missouri to Fort Yates. All these prisoners were subsequently (on the 22d of July) turned over to the Indian agent at the Standing Rock Agency.

On the 19th of July Sitting Bull came into Fort Buford and gave himself up. With him surrendered 187 souls, men, women, and children.

On the 29th day of July these Indians were sent by steamer to Fox Yates. Subsequently, in pursuance of instructions from the General of the Army, they were transferred to Fort Randall, where they are now held as prisoners of war.

It is understood that there are still some thirty five families of Sioux at Wood Mountain and Quappelle. With this exception, all of the hostile Sioux are in the hands of the government, and those who remain in the British provinces are too few in number and too much broken in spirit to leave room for apprehension of annoyance from them. The Sioux war, which commenced in 1876, and which was carried on at a great cost of life, as well as of money, is finally closed.

I desire to invite special attention to the services rendered by Major Brotherton, of the Seventh Infantry, and by Major Ilges, of the Fifth Infantry, and the officers and men under his command. To Major Brotherton is due the credit of having originally suggested the course of action which resulted in the surrender or capture of Sitting Bull and his adherents. During the progress of the negotiations which brought these Indians back to our soil he displayed the utmost patience, tact, and discretion; he was unwearied in his efforts to accomplish the results desired, and no term less strong than "invaluable" would fitly characterize the service which he rendered.

The troops under Major Ilges, including the garrison of the cantonment at Poplar River and the detachment from Buford, were subjected to great hardships. Much of the time during their movements the thermometer registered from 20° to 50° below zero Fahrenheit. Their marches were made through snows, which rendered the roads over which they moved almost impassable. They endured every hardship without complaint, and when a severe conflict with the Indians was expected they prepared to meet it with cheerful alacrity.

Major Ilges's conduct deserves especial commendation. Rendering an intelligent obedience to the instructions which he had received from these headquarters, he made every reasonable effort to induce the Indians who had gathered at Poplar River to surrender; but when these efforts had failed he struck promptly and effectively. He shares with Major Brotherton the honor of having brought the war to a conclusion.

The detachment from the garrison of Fort Assiniboine, which, under Captain Morris, of the Eighteenth Infantry, moved down the Milk River, was subjected to the same hardships as those which Major Ilges's troops encountered, and they endured them as cheerfully.

The detachment started from its post very promptly, and the march was conducted by Captain Morris with great vigor. It was through no fault of his or theirs that they did not succeed in intercepting the Indians. The order for the movement was given too late from these headquarters. They deserve great commendation for their efforts to be of service.

No important building operations have been undertaken in the department during the past year except at Fort Maginnis; the new post near the Musselshell River, at Fort Assiniboine, and at Fort Snelling.

The construction of Fort Maginnis has been delayed by the unexampled low water of the Missouri River. It has been impossible to transport with sufficient speed to enable the work to be carried on rapidly that portion of the material required which is furnished from Minnesota or points farther east. Colonel Rizer, the commander of the district, has gone to the post, and is pressing forward the work, and I have no doubt that a sufficient number of buildings to give comfortable

shelter to the garrison will be completed before the coming winter sets in.

Work upon the enlargement of Fort Assiniboine has been delayed by the same cause, and much that it was hoped would be accomplished this year will not be completed until next spring.

The buildings for the headquarters of the department at Fort Snelling, the construction of which was commenced last year, had progressed so far in May last that it had become possible to remove the headquarters to them. This change was accordingly made on the 4th of June.

The buildings completed are:

1. The office building.
2. The department commander's quarters.
3. Seven sets of field officers' quarters.
4. Five sets of captains' quarters.
5. Stables for officers' horses attached to each set of quarters.
6. A stable for public animals.
7. Quarters and mess-house for stable employés.
8. A blacksmith's shop.
9. A forage-house.
10. A coal shed.
11. A carpenter's shop.

Quarters for clerks and messengers are yet to be built. Contracts for their construction have been made, and it is expected that some of them will soon be ready for occupation.

Works for the supply of water have been constructed, and are in very satisfactory operation. They furnish an ample supply, not only for domestic use in the quarters, but for the extinguishment of possible fires. The pump which supplies the water can be attached directly to the main pipe, and from fire-plugs placed along the line of quarters streams of great force can be thrown over all the houses without the intervention of a fire engine.

All these buildings have been constructed in the most substantial manner, and the money appropriated for them has been expended, I think, in a judicious and economical manner.

Work on the Northern Pacific Railroad has been prosecuted during the whole year. The track now reaches the Yellowstone River, and regular trains are running to the village of Glendive on its banks. Additional track has been laid for 40 miles or more beyond Glendive, and it is expected that the rails will reach Miles City by the middle of November.

Five companies of mounted troops and four companies of infantry, the whole under command of Maj. Lewis Merrill, Seventh Cavalry, have been employed, during the summer and thus far during the autumn, in protecting the road, its workmen, and contractors. This duty has been well performed. The men engaged in the work of construction have been not only protected from actual injury but preserved from the causeless panics which almost always occur when men, who have no experience of the frontier, are sent into the Indian country.

In June last serious disturbances occurred at the village of Fort Pierre, on the right bank of the Missouri, 25 miles below Fort Sully. This point is the eastern terminus of the route over which a large part of the freight carried to and from the Black Hills is transported. It is the route over which all the supplies for Fort Meade are carried. Those disturbances arose from the proceedings of a combination of freighters who had conspired to raise the rates for transportation, and who took,

in some instances, unlawful measures to prevent the carriage of goods at smaller rates than those which they had prescribed.

Some government stores were then at Pierre and more were expected from the east. To protect these stores, on the 24th of June, two companies of the Eleventh Infantry were sent from Fort Sully to East Pierre on the left bank of the river, and afterwards they were ordered across the river to the scene of the disturbance.

On the 7th of July two companies of the Seventh Cavalry were ordered to proceed to Fort Pierre, patrolling the road to that place and giving protection to any trains loaded with government stores which they might find enroute.

Fortunately the near presence of these troops was sufficient to prevent any interference with trains carrying government supplies, if such interference was intended. In no case were they obliged to use force to accomplish the object for which they had been sent out.

All danger of further disturbance having passed away, on the 26th of July they were ordered back to their stations.

During the past summer several riotous strikes for higher wages occurred at Bismarck among the deck hands and laborers employed upon the steamboats engaged in carrying freight and passengers on the Missouri River. Enormous wages were demanded, and when the owners of the boats refused to accede to their demands, the rioters, partly by persuasion and partly by force, prevented new men, engaged and brought from Saint Paul, from proceeding with the loading of the boats. On these occasions it was necessary to bring over troops from Fort Lincoln to protect from violence government stores lying at the docks and boats upon which such stores had already been loaded. Here again the mere presence of troops was sufficient to accomplish the end sought.

I regret to say that the outlook in Northern Montana is not as favorable as could be desired. For many years past the Indians of the Northwestern British provinces, who are mainly dependent on game for their support, have vibrated across the frontier, following the herds of buffalo and coming as far south as the Judith Basin and the valley of the Missouri. The buffalo are diminishing in number with great rapidity, and in the regions over which they have hitherto wandered they are being fast replaced by herds of cattle. The Indians still follow the diminished herds, and probably must follow them to avoid starvation. The natural consequence is that when buffalo cannot be found cattle are killed as a substitute. Beef is as acceptable to an Indian as it is to a white man. Many complaints are made that cattle are slaughtered by Indians, and such acts are generally attributed, probably with reason, to Indians from beyond the frontier.

The cattle raisers of Montana are alarmed; they fear that the speedy extinction of the buffalo will leave these Indians no resource except the herds of cattle on this side of the border, and that their industry will be most seriously injured, if not entirely destroyed. They have begun to form associations of a semi military character for mutual protection, and it is proposed by them to put forces in the field from time to time to hunt down Indians who may be guilty of depredations on their stock.

It is unnecessary to enlarge upon the serious evils which are likely to result from such a course of procedure. But such a course can only be prevented by giving to the settlers full protection in some other manner. I think that it will require the best efforts of the governments on both sides of the boundary to prevent the evils which are likely to occur.

Forts Assiniboine and Maginnis are well placed to give such protection.

tion as military posts can give, by their mere existence, and they are also well placed to serve as the bases for systems of patrols established to warn off or drive off the foreigners.

The present condition of affairs is an ample vindication of the foresight which established Fort Assinniboine two years ago, expensive as its establishment has been. As I write 12 officers and 240 men are moving out from it to drive off foreign Indians and half-breeds who have intruded upon the Indian reservation, between the upper Missouri and the boundary.

The flood in the Missouri River last April devastated the bottom lands from below Pierre to below Sioux City, causing a widespread destruction of property, especially in and about the towns of Yankton and Vermillion, and the neighboring valley, leaving many of the inhabitants not only destitute of means, but absolutely without shelter or fuel, and many without clothing. Fortunately the loss of life was small. On the 12th of April the Secretary of War directed me "to ascertain what quartermasters' and subsistence stores were required to alleviate the suffering of the victims of the freshet on the Missouri River at Pierre, Fort Randall, Yankton, and Vermillion, and to make such immediate issues as in my judgment shall be necessary." Under these instructions orders were at once issued to the commanding officers of Fort Sully; Lieutenant-Colonel Townsend, Eleventh Infantry, of Fort Randall; Colonel Andrews, Twenty-fifth Infantry; and Captain Wheeler, Q. M. D., at Yankton, to take the necessary steps, in accordance with these instructions. Captain Kline of the Eighteenth Infantry, then in Saint Paul, was ordered to Sioux City to co-operate in the same work. Captain Clague, Subsistence Department, was directed to go over the devastated country and collect information to guide future action. It is not necessary to detail at length the particulars of the loss; about a quarter of a million acres of fertile settled land on the Dakota side of the river alone were swept over by the water and ice. The number of sufferers is estimated by well-informed persons at about 8,000. The necessity of many of these people was not only for present relief, but also for seed and other means to renew their farming operations. In some cases the ground did not become clear of water and fit for planting in time to raise a crop last season. Numbers of persons with land so situated will require further assistance to take them through the coming winter.

The following is a list of Army supplies issued for the relief of these sufferers:

Quartermaster's Department.		Subsistence Department.	
Articles.	Quantities.	Articles.	Quantities.
Corn for seed	pounds.. 2, 600	Pork	pounds.. 13, 473
Oats for seed	do.... 1, 530	Bacon	do.... 3, 339
Shirts, new pattern	300	Fresh beef	do.... 13, 475
Drawers, new pattern	pairs.. 269	Flour	do.... 39, 370
Stockings, new pattern	do.... 500	Hard bread	do.... 1, 247
Blankets, new pattern	424	Beans	do.... 508
Drawers, old pattern	pairs.. 79	Rice	do.... 38
Hats, old pattern	320	Coffee, green	do.... 1, 658 $\frac{1}{2}$
Forage caps, old pattern	479	Tea, black	do.... 191 $\frac{1}{2}$
Trousers, foot made, pattern	pairs.. 602	Sugar	do.... 1, 676
Sack coats, lined, pattern	166	Soap	do.... 14
Sack coats, unlined, pattern	86	Salt	do.... 914
Blouses, lined, plaited, pattern	44	Potatoes, for seed	do.... 2, 431
Shoes, pegged	pairs.. 647	Yeast powder	do.... 588
Shoes, sewed	do.... 27		
Shirts	488		
Blankets, woolen	24		

In addition to the supplies furnished by the government, I received contributions for the assistance of these sufferers, through Lieutenant General Sheridan, to the amount of \$4,736; also through the chamber of commerce of the city of Saint Paul, by General H. H. Sibley and Thomas Cochran, jr., esq., to the amount of \$975. This very timely addition to the means at my command enabled me to afford additional relief greatly needed. The money was allotted as follows: For the purchase of clothing, materials for clothing, boots and shoes, all for women and children, for general distribution, \$1,559.54; to be disbursed through Capt. D. D. Wheeler, assistant quartermaster at Yankton, \$2,801.40 through Capt. Jacob Kline, Eighteenth Infantry, at Sioux City, \$800 through Col. George L. Andrews, Twenty-fifth Infantry, \$550. All the disbursements have not yet been completed; as soon as the money has been expended the accounts will be completed and forwarded.

The supplies provided for the troops in the department during the past year have been excellent in quality and ample in quantity. The duties of the officers of the staff departments, serving at these headquarters, have been performed in the most satisfactory manner, and I desire to express my thanks to them for their services. I forward herewith their annual reports, the reports of the commander of the district of Montana, and of the several posts in the department.

I have the honor to be, very respectfully, your obedient servant,

ALFRED H. TERRY,
Brigadier-General, Commanding.

The ADJUTANT-GENERAL

Of the Military Division of the Missouri, Chicago, Ill.

3 B.—REPORT OF BRIGADIER-GENERAL CROOK.

HEADQUARTERS DEPARTMENT OF THE PLATTE,
Omaha, Nebr., September 29, 1881.

SIR: I have the honor to state that since the date of my last annual report no event of note has occurred in my department. The Indians throughout the department have been unusually quiet, and there have been no depredations committed by them. They are, in my opinion, gradually improving in knowledge of civilized life, and are paying more attention to agriculture than ever before, and, I am informed, with good results.

The only important military change in the department in the year has been the transfer of the Fourteenth Infantry to the Department of the Missouri, and the Sixth Infantry from that department to the station occupied by the Fourteenth Infantry in this.

Since my last report Fort Niobrara has been completed; the garrisons at Fort Hartsuff and Camp Sheridan have been withdrawn. The public buildings at Fort Hartsuff, as well as those at the old posts of Camp Stambaugh, Fort McPherson, and North Platte, have been sold at good and satisfactory prices realized.

I was notified, about the 1st of August, that the Uncompahgre and White River Utes were to be moved at once from their old agencies in the Department of the Missouri and located at a new agency selected at the junction of the White and Green Rivers in my department. At the same time instructions were received to establish a post at the new agency. Immediately upon receipt of these instructions, in order to

a route for supplies might be established, suitable parties were sent from the post on White River, from Green River City, from Fort Bridger, and from Park City, Utah, with orders to explore the country between the respective points of departure and the site of the new agency.

Nearly the whole of the month of August was thus employed, and reports from all the parties received. I have selected the route from Park City, Utah, as the most practicable one at present, and supplies are being forwarded to the new post as rapidly as possible. This route, though not the shortest, was the only one available, as, owing to the lateness of the season, there was not time to accomplish, with the labor of the troops at my command, the necessary work to make any other route practicable for the transportation of supplies.

Four companies of the Sixth Infantry are now stationed at the new Ute Agency, and the new post has been designated as Fort Thornburgh, in memory of the late Maj. Thomas T. Thornburgh, Fourth Infantry, killed at White River. Every effort is being made to hurry forward the construction of the new post, and I have no doubt the command will be comfortably sheltered before winter sets in.

In connection with the report of the Chief Quartermaster of the Department, I desire to invite the attention of the division commander to the inadequacy of the funds allotted to this department for repairs to barracks and quarters. The public buildings in this department, with the exception of those at a few posts recently constructed, are generally old and out of repair. The old posts were, as a rule, hastily constructed, many of the buildings of logs, and lacked entirely the elements of durability which characterizes the construction of the more recently built posts. The rapid deterioration of buildings in this climate which are not kept in perfect repair induces me to ask especial attention to this branch of my report.

I have to state that there has been a marked improvement in rifle practice in the troops of this department during the past year, the active operations of the last few years having hitherto prevented the progress which has this year been made.

The discipline and conduct of the troops have been good, and their general condition satisfactory.

The reports of the chiefs of the staff bureaus, giving full accounts of the operations of their respective departments during the past year, are hereto annexed, marked A, B, C, D, E, F, and G.

Very respectfully, your obedient servant,

GEORGE CROOK,
Brigadier-General, Commanding.

The ASSISTANT ADJUTANT-GENERAL,
Military Division of the Missouri, Chicago, Ill.

3 C.—REPORT OF BRIGADIER-GENERAL POPE.

HEADQUARTERS DEPARTMENT OF THE MISSOURI,
Fort Leavenworth, Kans., September 22, 1881.

COLONEL: I have the honor to submit the following brief report of affairs in this department since the date of my last annual report; October 1, 1880.

At the date of that report there existed no trouble from Indians within the department, although both in the Ute country and Southern New

Mexico relations with the Indians were in such a delicate position that outbreaks at any time were not unlikely.

INDIAN TERRITORY.

At the date of my last report it was uncertain whether Payne, who had been indicted and was under bonds of the United States district court for invading unlawfully the Indian Territory with a band of so-called settlers, would, in his own critical position before the United States courts, again attempt to invade and locate in that Territory; but he began soon after to assemble a considerable following, numbering several hundred persons, along the southern line of Kansas, between Caldwell and Arkansas City, with the openly declared purpose, as announced by circulars over his own signature and notices in the newspapers, to force his way into the Indian Territory and occupy the district known as Oklahoma. Although there was no concealment of any kind on his part, or that of any one else, that his organization and its purposes were in absolute violation of the laws of the United States and the proclamation of the President based thereon, yet he was permitted, for want of laws to cover the case, to organize a force of large dimensions and lead them down to the line of the Indian Territory, which he would undoubtedly have entered in violation of law and in the face of a certain outbreak of the Indians, which would have probably devastated the Kansas frontier and cost the lives of hundreds of innocent people, but for the presence and assured resistance of the cavalry force of the United States which I had assembled along that line to prevent such an outrage. So persistent was Payne and his following that I was obliged to re-enforce considerably the first detachment of troops sent there, and to threaten any one who crossed the line into the Indian Territory that the animals, ridden or driven, should be killed the moment they crossed the line, and the men arrested and turned over to the United States courts. They marched to and fro along the line, keeping carefully within the State of Kansas, and finally encamped near Caldwell, where they remained during an extremely cold spell for three weeks, in the hope that the troops would finally return to their posts. Finding that there was no prospect that the troops would abandon their position, they finally, about the 6th of January, dispersed and scattered themselves among the settlements of Kansas, being compelled to it by extreme cold and suffering. Whatever may be Payne's object in all this, I think it certain that his followers firmly believed, through his representations and reasonably plausible legal authority, that they had the right to settle on these lands in the Indian Territory, and that their right to do so was obstructed unlawfully by the United States forces. It seems strange that such organizations can be openly made and everywhere announced to violate the laws of the United States at such fearful risk to exposed settlements, and that there should be neither legislative nor public sentiment to check it or to punish the criminals. Payne was afterwards tried for his invasion by the United States courts and sentenced under the law to pay a large fine, but as he is utterly impecunious, of course it never has been and never will be paid.

He is now engaged - although a sentenced criminal for the same act - in getting up another organization for precisely the same unlawful purpose, and no doubt will be so successful that troops must be again taken from their posts and legitimate duties to oppose his invasion by force. It would seem that in the light of these experiences some law should be passed to cover his case and that of others engaged in the same business.

At present there are troops enough in that region to deal with attempts likely to be made, but it may well happen that pressurers or emergencies elsewhere may at some time leave us in such a position that the force in the Indian Territory will be entirely insufficient to protect it. Even now a great sensation has been occasioned by the discovery of silver in the Wichita Mountains, in the south-west of the Indian Territory, and it has already been necessary to employ considerable military force to prevent invasion in that quarter. Whether there be really valuable discoveries of silver in those regions or whether these sensational reports are merely parts of a grand plan for invading the Indian Territory from both sides, is not known, but the resolute purpose of thousands of persons in this part of the country to occupy and possess the lands in the Indian Territory is unquestionable and must soon be met, if it be intended to prevent such more stringent laws and heavier personal penalties than

there has been no serious trouble of any kind with the Indians in the Territory since my last report. The Northern Cheyennes, under Little Wolf, have always been dissatisfied and have been the only disturbing element among the Cheyennes near Reno. Little Chief himself has behaved with great forbearance and consideration under a sense of deep regret and want of good faith toward him—a feeling which I think is justified by the facts. His return north with all his band is an act of justice which, in my opinion, and as frequently represented by the public, should have been done long ago.

It does not appear at all likely that we shall at present have any serious trouble with the Indians in the Territory except what arise from the complaints about food, unless the Indians are driven to hostile and extensive invasions of their lands by white intruders, with which we can probably deal satisfactorily, unless the military force be called upon by the necessities of other parts of the country.

THE UTES.

At the date of my last annual report, Mackenzie, with a large force of cavalry and infantry, occupied the Uncompahgre country to prevent a break of the Indians in that section. A considerable force was stationed at White River, in Northern Colorado, and at Fort Lewis, in the Southern Ute country. Finding that every thing was likely to be quiet in the Uncompahgre country for the winter, Mackenzie's cavalry and part of the infantry with him were withdrawn to posts where men and animals could be properly sheltered and cared for during the winter months. Meantime a treaty was negotiated with the Indians providing generally that the White River Utes should surrender their reservation and move over to the Uintah reservation in Utah; that the Uncompahgre Utes should move onto a reservation on Grand River, where, as lands suitable for them might be found west of their reservation; and that the Southern Utes should occupy practically the same reservation along the valleys of the streams putting into the Grand River from the north.

Late spring the White River Utes moved to Uintah without objection. No suitable lands having been found for the Uncompahgre Utes within the limits of Colorado, a reservation for them was made by commissioners acting under the Interior Department, at the mouth of the White and Green Rivers, in Utah. The temper of the Uncompahgre was not good, and it was doubtful whether, when the

time came, they would remove peaceably to their new reservation. To meet any contingency of the kind, I assembled at their agency during the spring six companies of the Fourth Cavalry and nine companies of infantry, all under command of Colonel Mackenzie, Fourth Cavalry. I started for the Uncompahgre myself about the 1st of August, but on reaching Fort Garland I was met by dispatches informing me of the raid of Nane and his band of Apaches into the southern part of New Mexico. I did not consider it judicious, under the circumstances, to leave the telegraph and railroad lines for so long a time, and remained at Fort Garland, where I was in the best position to hear and act upon information promptly from either direction.

Everything proceeded with seeming quiet among the Uncompahgre until August 23. Preparations of the commissioners to remove the Uncompahgre Utes to the junction of White and Green Rivers having been completed, the commissioners, on the 23d of August, called upon the Utes to begin their movement thereto, but the Indians flatly refused to move at all. Mackenzie at once reported the facts to me and asked for orders. I had some time previously sent him orders what to do by mail, but I at once telegraphed him the substance of those orders, as follows:

FORT GARLAND, COLO., August 24, 1881.

Your telegram received. You will use no military force against Utes unless called upon in writing to do so by the commissioners or agent, stating that they cannot move the Indians without military force. If such application is made, you will assume charge of the matter yourself, giving such orders and taking such action as you yourself consider best, being careful to use no more force than is necessary to accomplish the object. Full instructions on this subject were sent you by mail on the nineteenth. If you have not force enough, let me know at once and I will re-enforce you as largely as is necessary. Acknowledge receipt, and report action.

JNO. POPE,

Brevet Major-General, Commanding

Col. R. S. MACKENZIE, U. S. A.,
Uncompahgre, via Gunnison.

Acting on these orders, Mackenzie assumed entire charge of the Indians himself, and calling them together informed them in brief words what were his orders, and that he should execute them, by force if necessary. He gave them one day in which to consult and decide, meantime posting his troops, so as to be ready for refusal. The next day the Indians submitted and pledged themselves to go quietly and at once. Mackenzie being satisfied of their good faith, returned them to the charge of the Indian commissioners, and they moved off in a day or two thereafter peaceably, but manifesting the greatest grief and regret at being obliged to abandon, in this manner, the home of their tribe for so many years. The whites who had collected in view of their removal were so eager and so unrestrained by common decency that it was absolutely necessary to use military force to keep them off the reservation until the Indians were fairly gone. The last heard of the Indians they were far down on the Grand River, moving quietly along the north side of the river to Utah. The Uncompahgres are not satisfied, and think themselves wronged, but although some of them may straggle back to their old country from time to time, I do not believe that there will, in the future, be any serious trouble with them beyond the trifling difficulties which may occur from unexpected encounters with white prospectors, who will follow them in the future as in the past to their new reservation and renew the complications which the present arrangement has only temporarily bridged over.

I cannot speak too highly of the fine judgment and sound discretion

and well timed firmness exhibited by Colonel Mackenzie in the performance of so delicate and hazardous duty from the beginning to the end. He is entitled to and should receive from the government proper and sufficient acknowledgment.

I append hereto Colonel Mackenzie's report, giving all necessary details of the transactions above recited in general terms.

THE APACHES OF NEW MEXICO.

About the 13th of July, Nane, with about fifteen men of his band, crossed the Rio Grande near Fort Quitman, in the Department of Texas, and made his way without discovery to the mountains near the Mesca-ron agency, New Mexico. Here he was joined by twenty five Mesca-ron from that reservation, and began his raid by attacking a small party of men.

Lieutenant Guilfoyle, with a company of Indian scouts and a detachment of cavalry, immediately pursued the band and had several sharp skirmishes with them. Nane's band, at no time numbering over forty Indians, rushed through the country from one mountain range to another like a pack of hungry wolves, killing everybody they met and stealing all the horses they could lay their hands on. As that whole section of country is full of Mexican herders, miners, and prospectors, wandering about without arms or taking the least precaution, of course a number were met by the Indians and some of them killed and wounded. All the troops in that region, numbering six companies of cavalry, soon afterwards re-enforced by two more cavalry companies with two companies of Indian scouts and eight companies of infantry, immediately rushed out from their various posts and camps and urged the pursuit of the Indians with great vigor and energy. A number of severe fights occurred at various places, in which Lieutenant Guilfoyle, Captain Parker, Lieutenants Valois and Burnett and Lieutenant Smith, all of the Ninth Cavalry, were engaged and rendered gallant service, the latter officer being killed at the head of his command. The fights, although at a small force on either side was engaged, were very severe, the losses of both Indians and soldiers being unusually large.

The difficulties of the country, among the almost inaccessible mountains of that region, were very great, and the Indians scattered themselves so much when closely pressed that it was necessary to hunt them down almost individually in the rough and difficult country south and west of Fort Craig, but it can be truly said that the troops did everything that was possible, and pressed the Indians so closely and persistently from so many directions that they had no time to rest, and finally were driven across the Mexican line, closely followed by the troops, who, under the positive orders of the government, were not permitted to cross the Mexican line. As the Indians remounted themselves with stolen horses wherever they could find them, and scattered through the mountains by twos and threes whenever closely pressed, to unite again at points well known to them, and as it was therefore necessary to scatter the troops considerably to follow up the trails, it happened that whenever the troops met the Indians the forces of the two parties were not unequal generally, and the fights were correspondingly severe and the losses on both sides unusually large.

Colonel Hatch, Ninth Cavalry, was in personal command and direction of the troops in Southern New Mexico. His well known activity and gallantry were fully exhibited in this short raid. He did all that man could do, and is entitled to high consideration for and acknowledg-

ment of his services. It is with pleasure that I bear testimony to the qualities in Colonel Hatch, and to their effective illustration during the present summer.

The raids of the Apaches into Southern New Mexico for the last two years bear no resemblance to an Indian war or general outbreak. They rather resemble the operations of the cow-boys and other bands of robbers on the frontier, or to the parties of train robbers in Missouri. There is no great trouble in dealing with them when found. The difficulty is to find them. The Ninth Cavalry has been run down in men and horses by such harassing work for several years past, and are entitled to some rest, which I hope to give them this winter.

So long as our troops cannot cross the Mexican line, even in hot pursuit of bands of marauding Indians, and there is no co-operation of troops on both sides of our boundary line, and especially so long as these Indian reservations are maintained almost in sight of the Mexican line, across which they are safe from our pursuit, we may expect, and must expect, occasional raids. It is so easy to steal out of these reservations at night to commit depredations, and to escape afterward either to the agency or across the Mexican line, that it would require a fort at every ranch, every hole in the mountains dug by miners, with every herder and prospector in that region, to assure perfect security. Complete safety can only be found in the removal of these reservations to some point remote from their present dangerous localities, or in placing the reservations under charge of a military force to control the Indians and prevent such depredations. Under the present system we cannot know whether Indians leave the reservations or not until we hear of hostile acts fifty miles away, and nine times out of ten the Indian agent will deny that any of their Indians were concerned. This was notably the case with the agent of the Mescaleros during the late raid of Nane.

He denied positively that any of his Indians were absent, but nothing is more certain than that a considerable number of them were with Nane, and only within two weeks Major Henry, Ninth Cavalry, returned from a long scout after a band of Mescalero Indians who had been absent from the reservation since June 18, last—a scout undertaken by request of the agent himself. In April of last year the military found it necessary to surround the Mescalero Agency and take possession of the control of the Indians in the midst of Victoria's raid in that year. As long as the military retained this control the Indians were quiet, but about six months ago, under demand of the Indian Department, the control of the Indians was turned back to the agent, with the result above stated. It is idle to talk of civilizing the Mescalero Apaches. They are savages, pure and simple, and in the country they occupy with the inducements to raid and the present management of the tribe it is worse than childish to believe that they are being or ever will be reclaimed, or cease these raids upon isolated ranches or persons wherever they have the chance. I have established a post of three cavalry companies and one company of infantry on the Mescalero Reservation not far from the agency, to watch the Indians as far as we are permitted to do so, but I presume it will not be long before this precaution will be a subject of complaint.

It is hoped that the close and persistent pursuit of the band engaged in the late raid, and the severe damage inflicted on them, will for a time prevent another raid, but until the raiding Indians are killed or the Indian reservations removed, we may expect a renewal of these spasmodic raids at no very long intervals. Every one of these raids costs the Indians severely in men, and in the late raid Nane was only able to

together about fifteen men of the considerable force that Victoria and Russell had eighteen months ago. But for the assistance he received from the Mesqueros, no raid by Nane could have been possible.

The officers and troops engaged in these military operations in New Mexico have been so continually on the move that only telegraphic reports have as yet been made of results, without such details as are needed for a full history of their movements and skirmishes, but such reports will be forwarded as soon as received, and I shall then ask such recognition of valuable service for individual officers as they deserve and as may be proper.

It is most fortunate for New Mexico that Governor Sheldon, recently appointed, is a man of high intelligence and great energy and force of character. He has already organized and armed companies of volunteers at many points in the region subject to raids, and will act with them in entire harmony with the military forces. There is no doubt that such co-operation, if it will not altogether prevent further raids, will make them so expensive in life to the Indians that they will probably not be often repeated. The best cure altogether for these raids is the removal of the Mesquero Indians to some point remote from the Mexican frontier.

THE NAVAJOES.

This large and powerful tribe of Indians has been discontented and dissatisfied for some time, mainly on account of the restoration of Agent Estarlin, who, whatever else he may be that is worthy and good, is mainly not a good agent for such a tribe as the Navajoes. Whilst he may drift on for a time at the Navajo Agency without open trouble, I am entirely satisfied that there is danger all the time of serious difficulty. The want of an agent for these Indians having influence and control over them, during the late critical condition of Indian affairs in Arizona, and bordering the Navajoes on the south, was severely felt, and I considered it necessary to separate Captain Bennett, 10th Cavalry, who has been their agent for a year past, from his company and place him to watch the Indians and keep me informed of their doings and purposes, using his own personal influence with them, which is very great, to prevent an outbreak and to restrain them, even in small parties, from joining the Apaches just south of them. The Navajoes could, on reasonable estimate, place three thousand men in the field—a most formidable force in those mountains, and one which would require a very heavy force of troops to deal with. They are partly civilized, having had for many years constant intercourse and mingling with the whites. They are consequently quite intelligent and know perfectly well what are their rights as well as their wrongs, in dealing with their agents and with the people around them. To keep them peaceful and contented requires that they have an agent of unusual intelligence, force of character, and knowledge of Indians as well as of frontier whites. It is beyond dispute that their present agent is not such a man. I think it proper and due to the government that I should speak plainly on this subject. The Navajoes are rich in herds and powerful in numbers, courageous and sensitive of wrong, and make formidable warriors as any Indians on this continent.

The building of railroads through their country, bringing with them hordes of emigrants seeking arable and pasture lands, or prospecting for minerals in every recess and gulch of the mountains, is leading, with constantly increasing force and numbers, to such close contact at so many points of this great region that every day is increasing the dan-

ger of open collision and extended hostilities. Under such circumstances, the utmost care and nice management are essential to preserve from such scenes of violence and wrong on both sides as have, on a smaller scale, marked our history in the past, and, as a consequence, the very best men should be selected to transact the business of these Indians and regulate their relations with the whites. Perhaps such qualities are now more needed in an agent for these Indians than for any other Indian agent in the country. The sooner this matter is attended to the better for the Indians, for the frontier people, and for the government.

INDIAN OUTBREAK IN ARIZONA.

Although this outbreak occurred beyond this military department and in another military division, yet as it involved the movements of some of the troops in this department, it is proper to refer to it to the extent. It appears from the information received by me—and I was at the time in Santa Fé, N. Mex., where I had reasonably good opportunity to know quite fully the facts—that Colonel Carr, Sixth Cavalry, moved out from Fort Apache, under orders of his department commander, to arrest a medicine-man of the White Mountain Apaches, who was in the village of his tribe, about thirty miles distant from that post. Colonel Carr marched to the Indian village and arrested the man without resistance. He then marched back five or six miles in the direction of the post and encamped for the night, intending to return to the post the next day. Shortly after he reached his camp some of the Indian scouts belonging to his command came into the camp where the medicine man was a prisoner, for what purpose is not known. Captain Hentig, Sixth Cavalry, ordered them to leave camp, and as he did so turned to pick up his rifle, upon which the scouts, or some of them, fired a volley upon him, killing him and four enlisted men and wounding several others. Some of the Indians who had followed Carr from their village, together with some of the Indian scouts, began a desultory firing on Carr's command, which was of course returned. In the midst of the firing the medicine man was killed. Carr then returned to Fort Apache. Meantime some of the Indians or Indian scouts who had preceded him killed some couriers and messengers in the vicinity of the post and between the post and Camp Thomas. The day after his return to the post, Carr sent out a burial party about a mile from the post to bury several of the wounded in the firing the day before who had since died, and while engaged in this service the party was fired on by Indians—whether scouts or other Indians I do not myself know. Lieutenant Gordon was wounded. The fire was returned by the party and the Indians driven off.

Since that time the Indians have not been seen, nor have they, so far as I can learn, committed any depredations or other acts of hostility. The whole affair had much the appearance of a sudden and altogether unpremeditated flurry, and would probably never have occurred but for the firing of the Indian scouts on Hentig. There was certainly no concerted action or prearranged attack, and the Indians seem to have hidden themselves away, as much alarmed at what they had done as the people of the country were.

It was at first reported officially that Carr and his command had been massacred, and that the small force which had been left at Fort Apache was besieged by the Indians, who were reported also to be holding the mountain passes between Fort Apache and the railroad south, so as to prevent assistance from reaching the beleaguered garrison. Help was asked urgently from the troops in this department, especially from the

tion of Fort Wingate. I immediately directed Colonel Bradley, commanding Fort Wingate, to march at once toward Fort Apache with all of his force, and accordingly three infantry and two cavalry companies, carrying with them all the surplus ammunition from Wingate for the troops at Apache, marched from Wingate, via the Zuni route, for the relief of the garrison at Apache.

The restlessness and dissatisfaction known to exist among the Navaho who are in close proximity to and near relations with the White Mountain Apaches, made it essential to the safety of that whole front that they should be closely watched by a large force to prevent them joining or giving any assistance to the hostile Apaches. I accordingly ordered Colonel Mackenzie, who had just started the Uncompahgre to their new reservation in Utah, to march as rapidly as he could with six companies of the Fourth Cavalry, to Gunnison, Colorado and there take the railroad with his command, and report in New Mexico as soon as possible. The heavy rains and extensive washouts of the railroads in that region of country delayed him considerably, and he reported to me in person at Santa Fé on the 11th of September, the troops proceeding by rail to Fort Wingate.

In the mean time communication between Fort Apache and Camp Huachuca had been opened by a small company of scouts, and it became known that the whole affair had been grossly exaggerated and that Carr was not and had not been in any such condition as was represented. Soon as I learned this I directed the troops from Wingate to halt and my order found them, and wait the arrival of Colonel Mackenzie, who would march with the whole force, which would then be under his command, to Fort Apache, or into the Navajo country, as might seem proper.

General Wilcox, commanding the Department of Arizona, has recently informed me that Mackenzie was not needed, but under orders from the General of the Army, of September 17, he continued his march by the western route, while the troops from Wingate pursued the direct route, and both forces are now at Fort Apache, the Wingate troops having arrived there on the 24th of September and Mackenzie on the 25th. The Navajoes showed no sort of purpose to be troublesome nor to join the White Mountain Apaches, nor, indeed, did any other Indians in Arizona or New Mexico. The last telegrams from General Wilcox are to the effect that all the supposed hostiles are surrendering without firing shot or offering any resistance—a fact indicating very clearly that the so-called attack on Carr was the result of temporary excitement, and that there were no marks whatever of premeditation or intention to begin general hostilities.

The division commander promptly notified me that a regiment of cavalry and three of infantry would be sent to me as soon as I indicated they were needed, but beyond the troops in New Mexico and Mackenzie's six companies of the Fourth Cavalry, which I ordered from the country, and which were to leave there at any rate within a week, I did not consider any additional force necessary, and none was

GENERAL REMARKS ON THE INDIAN SITUATION.

In reviewing the history of Indian affairs west of the Missouri River, it is very striking to observe to what an extent the Indian frontier has moved westward within the past twelve years. When I first assumed the command of this department, in May, 1870, the Indian frontier of the department was the line of the Kansas Pacific Railroad and the eastern boundary of the Indian Territory, and thence westward the whole coun-

try was dangerous to the whites. The Cheyennes and Arapahoes ranged through Western Kansas and all over the plains as far west as the vicinity of Denver and as far north as the line of the Platte River. The Utes came out of the eastern range of the Rocky Mountains, west and south of Denver, as far down as the Republican River of Kansas on the east, and as far south as the Panhandle of Texas, whilst the Comanches and Kiowas ranged through Northern Texas and along the eastern line of the Staked Plains into Western Texas and across the Rio Grande into Mexico. At that time—1870—all that region of country between Fort Riley and Texas on the south, Fort Riley and the Rio Grande on the west, and Fort Riley and the Platte River on the north, was dangerous Indian country, and was raided again and again by the Indians, the line of the Arkansas River being in the very center of hostile Indian country. To-day that whole region is as safe to white emigration and travel as any part of the United States, except a small strip near the Mesquero Agency, in the southern part of New Mexico. In short, the Indian frontier has been pushed westward roughly at least five hundred miles within the last ten years. The powerful tribes of wild Indians in the Indian Territory—the Cheyennes and Arapahoes, the Kiowas and Comanches—were subdued by active campaigns against them in 1874 and 1875, and have been so civilized by the Indian Bureau since that they are now content to lie idly around the places where beef and coffee and sugar are issued to them. They only show signs of discontent when rations are not plenty, and then never undertake any campaign, except against their agent, who is under the protection of the troops, but for which he would be changed by "casualty of service" every time the Indians were unusually hungry. There is very little danger of any trouble from them in the future, unless provisions are scarce or the whites overrun their country. With a few years more of the civilizing process I do not believe they will be capable of resenting anything.

The Utes have been forced back and back until at last they have been compelled to give up (very reluctantly) their reservations on the White and Uncompahgre Rivers beyond the Continental Divide, and remove far west into Utah, whence another removal westward is impossible. Almost the same history has attended the great bands of the Sioux between the Platte River and the British line. After much severe fighting and great loss of life, they are at last settled on reservations where they are undergoing the same civilizing process which has proved so successful with the Indians south of them. The Indians left practically at large are now sandwiched between the emigration from the East and that from the West, which has already begun to meet along the main line of the Rocky Mountains. Beginning at the Mexican line, these Indians are, first, the Apaches, probably seven thousand, all told; next the Navajoes, about fifteen or twenty thousand; and next the Utes, who extend now as far north as the Union Pacific Railroad, and number about five thousand. The waves of emigration, enormously hastened by the railroads, are now beating from both sides along this thin line of Indians, and, in the nature of things, must soon break through. The result is inevitable, and it should seem that the government should address itself at the very earliest moment to the question of preparing for it in such manner as will bring about its unavoidable accomplishment with the least injury and the greatest benefit to the Indians and to the country. It is impossible that this thin barrier of Indians can long withstand the pressure from both sides. To avoid the desperate conflicts which will precede the final ending, attended, as they would be, by great loss of life—the greater part of which would be visited upon the

it whites and the savage, powerless in the end against such a really the practical question to which the government should itself with all haste. The time is short, at the best, in which to for it, and no one can tell how circumstances now in progressorten it. I do not undertake to say without being asked what is be done in a matter involving such serious results, but it is not or to suggest, 1st, that the agencies of the Apaches should be l to some place remote from the Mexican line; and 2d, that the tribes, Apaches, Navajoes, and Utes, should be withdrawn from the advancing emigration on both sides of them and be placed ear of one or the other, and not left to be destroyed between

MILITARY POSTS.

military posts in this department are generally in fair condition, the posts in Southern New Mexico. Even had it been desirable those in thorough repair, it would have been well-nigh impos- do so because of the constant and harrassing field service of their is, which are never long enough at the posts to work steadily or efficient time; but the purpose to build a large post in Southern Mexico, near the junction of the Atchison, Topeka and Santa Fé, Southern Pacific Railroads, near Fort Cummings, capable of ng all the troops needed in that part of the country, rendered it able to expend any more money on the small posts now occupied is absolutely necessary to give shelter to the garrisons for temporary purposes. It is hoped that the needed appropriation for the large one referred to may be made at this session of Congress, as otherwise shall be obliged to expend considerable sums to keep the posts, it is intended to replace, in anything like habitable condition.

allowance to this department from the appropriation for barracks quarters for the repairs of buildings at the posts, although a fair allot- the money is made at division headquarters from the amounts to the division for the several departments constituting it, is ridiculously small and wholly insufficient for the most ordinary

Either the appropriation for such purposes should be much or the troops should get a much larger amount of what is appro-

amounts allowed for building posts on the frontier are so small notwithstanding the labor of troops—a labor which should not be l on troops serving in the field, for very manifest reasons—the re necessarily of the frailest and least substantial character, and constant repairs, made by the same labor of troops, until within years hardly a remnant of the original material remains in the gs. At the end of that time they are quite as worthless as they the beginning. Perhaps in times past such shelter was all that e afforded for the numerous small posts we were obliged to keep he frontier, when communication was unfrequent and difficult, concentration and transportation of troops over considerable s well-nigh impracticable; but at this day, when the railroad graph lines have made communication rapid and transportation s of troops almost equally so all over the Indian frontier, it should at troops can well be assembled in large garrisons and sheltered r. That such concentration would be of immense benefit to economy of military forces, and spirit and feeling of the troops, n be no doubt. Their effectiveness for the service they are called rform would be greatly enhanced, and every interest of the gov-

ernment and the Army be benefited. I have, however, dwelt on this subject so much in almost every annual report for a number of years past, that it is superfluous, if not unpleasantly persistent, to repeat the recommendations here.

The posts in New Mexico and Southern Colorado, which will be sufficient, and are likely to be in a sense permanent, are, first, Fort Bliss; second, the large post to be built near the intersection of the Atchison, Topeka and Santa Fé, and the Southern Pacific Railroads, which should hold the garrisons of Craig, Selden, Cummings, and Bayard; third, Fort Wingate, in the Navajo country, holding five infantry and two cavalry companies—a garrison sufficient for precautionary measures against the Navajoes; and, fourth, Fort Lewis, on the La Plata River, in Southwest Colorado. This post covers all Southern and Southwestern Colorado, and is in the section of country where the Navajoes and Southern Utes hold common possession, their reservations being practically conterminous. It is admirably located for the military purposes required. It holds five infantry companies—one mounted—but it should be enlarged and finished at an early day, so as to hold at least eight companies, three of which should be cavalry. With these posts I believe that New Mexico and Southern Colorado would be perfectly secure, and as soon as they can be built all other posts in that section could be abandoned, except perhaps Fort Stanton, which we shall be obliged to occupy until the Mescaleros are removed. I shall submit estimates for building the large post and completing the others, for which I trust Congress will make necessary appropriation. No contracts could be made for building Forts Lewis and Bliss for the amounts allowed for them. Indeed, the smallest bids were more than double the amount authorized. It was necessary, therefore, to buy the material and build the posts by the labor of troops. In the case of Fort Lewis this was accomplished in reasonable time, and with reasonable, though not entire, success. The troops at Fort Bliss, and indeed everywhere in Southern New Mexico, have been so constantly in the field that by no means the same progress has been made there. All that could be done was done, and I hope that for some time to come the troops will not again be taken off for other duty.

THE TROOPS,

The troops serving in this department are the Thirteenth, Fourteenth, Fifteenth, Nineteenth, Twenty-Third, and Twenty-Fourth Infantry, the Fourth and Ninth Cavalry, and four companies of the Tenth Cavalry, and are all in good discipline and general condition of effectiveness except the Ninth Cavalry and Fifteenth Infantry. These two regiments have for several years been almost continuously in the field, the greater part of the time in harassing and wearisome pursuit of small bands of Indians who infest the mountains of Southern New Mexico and Mexico and are, therefore, much run down in every way. They need rest and recuperation, and I trust it will be in my power this autumn to replace them at their stations by fresh troops, and bring them into posts where they can have the opportunity not only to rest, but to re-establish discipline and tactical knowledge, which have been considerably impaired by the service they have had to perform for a number of years past.

Target practice has been carried on with zeal and industry and with gratifying success, as, I think, will be plainly illustrated in the competitive shooting required by the General Orders from Army headquarters. There is a great deal of interest on the subject everywhere in the department, an interest which I have encouraged by every means at my

command. More and more every day, even in well organized armies, personal skill in the use of small-arms becomes essential and commands attention and encouragement. In Indian wars, which are of necessity running skirmishes in almost every case, the skillful sharpshooter is invaluable, and ours, of all the armies in the world, should do most to secure as large a number of good marksmen as constant practice, stimulated in every proper way, can secure for us. There is no doubt that the General Order from Army headquarters on this subject will prove of the greatest value to the Army.

SCHOOL OF APPLICATION.

The duties of the Army on this frontier since 1865 have consisted mainly, if not wholly, of continuous and harassing campaigns against Indians, generally in small detachments, in building shelters for the troops by their own labor, and in driving wagons, so that practically the Army in this region has consisted mainly of scouts, teamsters, and laborers. In the nature of things such service is the very opposite of being conducive to the proper discharge of military duty or the acquirement, either in theory or practice, by officers or soldiers, of professional knowledge or even of the ordinary tactics of a battalion. Everything, however, now indicates a condition of Indian affairs in the near future which will enable us to concentrate the troops at a few large posts, where all the essential instruction for well-organized armies can be readily and successfully undertaken. I think it may be fairly assumed, from practical results within the last ten years, that in much less time than that in the future our Indian relations will be so far settled that nearly all the small posts and cantonments on the western frontier can be dispensed with. Certainly, if the same progress be made in the next ten years toward such disposition of the Indians as will assure their harmlessness, as has been made within the last ten years, we may safely count upon such a condition of things that the government shall be able to determine precisely what military force it is its purpose to keep on foot and to select the points at which it shall be posted.

Fort Leavenworth, in the very center of one of the richest agricultural districts in the country, with easy communication to all parts of the country by rail, and with its ample reservation of 6,000 acres of land beautifully diversified, will, beyond doubt, be one of the principal points of occupation by a considerable part of our permanent army of the future. It seems eminently proper, therefore, that, in anticipation of such results, preparations should be begun to provide here the theoretical and practical instruction needed constantly by all armies, and certainly by ours as much, if not more, than most others. The organization of the "School of application" here, to go into operation as soon as the necessary buildings can be prepared, is an immense advance toward that condition of knowledge and efficiency in the Army which has been so long wanting and so sincerely craved by every grade of officer and enlisted man. It has been a genuine satisfaction to me that this school was determined on, and it will be a great source of pleasure to me to do all I can to make it successful. It is a great boon to the Army, and that its results will amply repay the government there is no doubt.

Every effort is being made to complete the arrangements for the shelter of the garrison for the school and of the officers to be sent here for instruction. I cannot venture to say when everything will be ready to

open the school, but it will certainly be as soon as willing labor and deep interest can make it.

The administrative duties of the department have been most efficiently and satisfactorily performed by the respective chiefs of the staff departments serving at these headquarters. The troops have been well supplied in every respect, and the service is in as good condition as could be expected or desired. I wish here to express my entire satisfaction with these chiefs of staff departments, and think it simple justice that attention should be invited to them by name, as follows, viz: Maj. E. R. Platt, assistant adjutant general; Lieut. Col. J. D. Bingham, chief quartermaster; Maj. George Bell, chief commissary; Maj. D. I. Magruder, medical director; Maj. J. J. Coppinger, inspector; Lieut. T. N. Bailey, chief engineer; Capt. D. M. Taylor, A. D. C., and chief of ordnance; Capt. W. M. Dunn, jr., Second Artillery, A. D. C.; Lieut. W. Groesbeck, judge-advocate, and Maj. George H. Weeks, depot quartermaster. All these officers are entitled to the thanks of the department commander, who hereby tenders them.

A roster of the department and a field return of troops serving in are herein transmitted.

I am, colonel, respectfully, your obedient servant,

JNO. POPE,

Brevet Major-General, U. S. A., Commanding.

Col. W. D. WHIPPLE,

Assistant Adjutant-General,

Military Division of the Missouri, Chicago, Ill.

3½ C.—REPORT OF COLONEL HATCH.

HEADQUARTERS DISTRICT OF NEW MEXICO,

Santa Fé, N. Mex., October 3, 1881.

SIR: In compliance with telegram of the general commanding, dated September 27, 1881, I have the honor to report as follows:

During July our troops and Indian scouts were active, scouting the Mexican line. Lieutenant Guilfoyle, with a company of Indian scouts and detachments of L troop, Ninth Cavalry, when scouting country east of Fort Bliss, came upon a small band of hostiles, following them over the Rio Grande. These hostiles were probably Mescaleros from Mexico. This band, with others under Nana, made their way to the San Mateo Mountains, defeating a citizen company of 36 men, capturing all their horses and equipage, on August 1. D troop, of the Ninth Cavalry, had been ordered to the San Mateo Mountains on the 28th of July, and passing through these mountains, in advance of the hostiles, turned to the southwest without finding the hostiles in the mountains, as was expected. The hostiles, on leaving the San Mateo, moved in a northwest direction, closely followed by Lieutenant Guilfoyle, who came up with them at Monica Springs, capturing some of their stock and killing some of them. In anticipation of this movement of the hostiles, I had, on the 1st, ordered K troop, Ninth Cavalry, to Rito Grande to head them off, which resulted in a sharp fight, with loss to them of two killed and four wounded in the company. Lieutenant Guilfoyle, with his scouts, having one more running fight, finally was thrown off the trail of the hostiles, who were killing people, and followed some of the bands of renegade Navajoes and others, who had taken advantage

of the raiding party under Nana to run off stock. A company, of the Ninth Cavalry, was brought up from Selden, pushed out west of Craig; I troop, Ninth Cavalry, stationed near Cañada Alamosa for the purpose of striking the Indians on their way south.

Taylor, with detachments of B and H troops, Ninth Cavalry, and A company, Indian scouts, was brought up to Craig during the 15th, by rail, and put on the trail the same morning twenty miles west of Craig; A company, of the Ninth Cavalry, had passed this locality, going west, before the hostiles passed south. Lieut. C. W. Taylor, Ninth Cavalry, came up with the hostiles at daylight in the morning of the 16th, in the San Mateo Mountains, soon routing them and driving them out of the mountains during the day.

On the 16th the hostiles were heading south, when Lieutenant Valois, with I troop, Ninth Cavalry, came on them, having a sharp fight, in which three men were badly wounded and a number of horses lost. The hostiles continued moving rapidly south, being joined by small parties, closely followed by Captain Cooney with A troop, Ninth Cavalry, Lieutenant Valois with I troop, and Taylor with his company of Indian scouts. To check the hostiles, I had ordered Lieutenant Smith with 46 mounted men from Cummings to neighborhood of Lake Valley. Lieutenant Smith attacked the hostiles in Garilan Cañon on the morning of the 19th, having with him only 17 men, and joined by a party of citizens commanded by a miner named Daly. Lieutenant Smith and 3 men were killed, a number wounded. Why Smith did not take all his men with him has never been explained. Daly, with most of the citizens, broke at the first fire. Sergeant Wood, of B troop, Ninth Cavalry, left in command, held his ground until Sergeant Anderson, of the same company, came up with the balance of the command.

There being no officer with the men, Anderson moved forward on the trail, taking his dead and wounded with him, as the trail led towards the Rio Miembres. On reaching that point the sergeant sent his dead and wounded into Fort Bayard. On the evening of the 20th all the troops in that vicinity were in full pursuit of the hostiles into Sonora, marching very rapidly night and day. The only result was forcing the hostiles to abandon much property stolen during the raid. During the time of the raid it rained continuously, causing much difficulty in keeping the trail. The troops made every effort to come up with the hostiles, and attacked with vigor when they did.

Captain Parker, Lieutenants Guilfoyle, Taylor, Valois, Burnett, and Wright displayed energy and courage, and are entitled to honorable mention.

The subreports called for have not been received, except those inclosed from Lieutenant Guilfoyle and Captain Parker. Supposing the telegraphic communication of September 27, referred to above, calls for immediate report, I forward without delaying for the arrival of the others.

Very respectfully, your obedient servant,

EDWARD HATCH,

Colonel Ninth Cavalry, Commanding.

ASSISTANT ADJUTANT-GENERAL,

Department of the Missouri, Fort Leavenworth, Kans.

3 D.—REPORT OF BRIGADIER-GENERAL AUGUR.

HEADQUARTERS DEPARTMENT OF TEXAS, .

San Antonio, Tex., September 27, 1881.

SIR: I have the honor to submit the following report of affairs appertaining to the military Department of Texas since I took command of it, on the 3d of January last. At that time their condition appeared very satisfactory. The arrangements between my predecessor and the Mexican generals in command on the line of the Rio Grande for friendly co-operation to preserve order and to prevent raids and disturbances along the common frontier seemed to have been productive of happy results. There was no trouble of any kind on either frontier of the department.

I am happy to report that, generally, this exemption from frontier troubles has prevailed up to this time. There have, however, been some exceptions. On about the 24th of April a small band of Lipan Indians from Mexico killed Mrs. McLauren, living on the Rio Frio, and robbed her house. As soon as information of this outrage was received at Fort Clark, the nearest military post, Lieutenant Bullis and a party of Seminole scouts were sent in pursuit by Colonel Stanley, Twenty-second Infantry, commanding the post.

Lieutenant Bullis found the trail, and followed it persistently for six days. On the evening of May 2 he discovered the marauders' camp, quietly surrounded it during the night, and at daylight led a charge upon it, killing four of the bucks, and capturing a squaw and child and all the property of the camp and twenty one horses. For this successful expedition Lieutenant Bullis deserves much credit.

Small parties of Indians have made their appearance about Peña Colorado and about Fort Davis. Their depredations were limited, so far as known, to stealing some horses and shooting some few cattle. Colonel Shafter, commanding Fort Davis and the subposts of Peña Colorado, Quitman, and the Presidio del Norte, took effective measures against them, and at this time they have disappeared.

It is presumed these Indians are of the bands residing in Mexico, though it is quite possible they belong to some of the tribes in New Mexico, and were returning to their reservations via Mexico and Texas.

The captured squaw reports that about fifty or sixty families of Lipans have their homes in the Sierra Carmen, in Mexico, adjacent to the Rio Grande, between mouth of Pecos and San Carlos. From numerous points on this line they cross into Texas in parties of three or four men on foot to steal horses, and then return to as rapidly as possible into Mexico. It is probable, too, that many half-breed Mexicans are connected with them, and join in these depredations. These Indians, besides, are in communication with the Apaches of New Mexico, who visit them, and in return are visited by them, and it is probably these visiting parties, ready at all times for plunder, who are so often seen in the country, and naturally create much alarm among the dispersed frontier settlers.

The near completion to and along the Rio Grande and the northern frontier of several lines of railroad will change very materially the conditions of the problem of protection and defense of those frontiers. The track of the Texas and Pacific road is laid as far as San Martin Springs, in longitude of Fort Davis, and about fifty miles north. The Southern Pacific is extending its track from El Paso, via Carajo Pass, Eagle Springs, Peña Colorado, Mayer's Spring, mouth of Pecos. It is to meet

set route," now running fifty miles west of this place to Sabinal, to be extended via Uvalde, a point eight miles south of Fort Del Rio, and mouth of Pecos. The International and Great Northern is completed, and now running to Los Raicos, beyond the mouth of Pecos, and will soon be completed to Laredo. The road from Corpus Christi to Laredo is completed, and cars are running over it. It is expected that the Texas Pacific and Southern Pacific will be in operation by January, 1882.

It is not believed that any military posts will be longer needed south of the Texas and Pacific Railway, except such as bear upon the defense or protection of the Rio Grande line. Forts Concho, McPherson, and Stockton are thus rendered unnecessary; Fort Griffin, no longer necessary, was abandoned as a military post in May last. If there are to be built at San Antonio for a regiment, to be kept in readiness at that post for an emergency at any point on either frontier, Fort Clark can also be given up. It is not probable that Indian incursions will ever again be made from any point in Mexico, south of the mouth of Pecos. From that point, to Quitman at least, they may be expected at any time, and the line of the Southern Pacific must be guarded in its entire length from mouth of Pecos to El Paso. Two posts, one troop of cavalry and one company of infantry each, will be necessary in the country between the Southern Pacific and the Rio Grande from mouth of Pecos to the Presidio del Norte. Should the Government determine to establish a small military post in the Sierra Carmen or near San Vicente, or even at San Carlos, it is believed that, between the troops thus established on either side, the Indians would soon be obliged to leave that country. A post of the same kind as those referred to above will also probably be necessary at the Presidio del Norte.

On the northern frontier, one post will be needed in or near the Guadalupe Mountains, and probably two north of the Texas and Pacific Railway in the direction of Fort Elliott on the western flank of the Territory.

A engineer officer of the department is now out with a party examining the country with the view of determining the points best suited for the location of these posts.

Del Rio is well located as it is, and its resources are available for frontier defense.

On the 28, 1881, General Servando Canales, an old and distinguished officer of the Mexican army, in command of the Rio Grande frontier, died suddenly at Matamoros. For years General Canales was active and persistent in his endeavors to break up the raiding parties and disorders which for so long a period had prevailed there. By his energy, his enlarged views, and the force of his personal character, he was very influential in bringing about the existing quietude of that frontier, and the happier feeling existing between its inhabitants.

The commanding officer at Fort Brown was instructed to pay proper attention to his memory. Copies of the very interesting correspondence of this action accompany this report (marked L).

With this report are inclosed the reports of the chiefs of the several staff departments at these headquarters (marked F, G, H, I, J, K, and L). Particular attention is invited to that portion of the chief quartermaster's report (I) referring to the subject of changing the times of contract and termination of contracts for supplies in this department. These views are shared by every one who has had experience with the present system. It will be observed that no stronger proof of

the desirableness of the change proposed could be given than the experience of this year. Many of the grain contractors have already failed, and it is apprehended that all of them will do so, in consequence of the great increase in the price of grain, owing to its scarceness since the contracts were made.

The recommendations of the chief commissary of subsistence regarding the furnishing new articles of supplies are approved and respectfully recommended.

It will be observed that not all of the posts in the department have been inspected since I assumed command. This is due to the great extent of the department, the amount of wagon travel to reach all posts, and to the many changes made in my staff during the time. The inspections will be made as soon as possible and be duly reported.

The acting judge-advocate discusses a very interesting point, and one attracting a good deal of attention at present—the necessity for longer taxing soldiers for the Soldiers' Home. His views, too, on the subject of garrison courts are approved.

The troops in the department have been promptly and regularly paid during the year.

The report of the medical director (K) embraces an interesting comparison of the relative rates of sickness with white and with colored soldiers in this department, reference to the quarantine laws of the State, and the results of his investigations on the subject of cattle diseases.

I desire to express my appreciation of the value to me of the services of the general staff officers at my headquarters, and of those of my personal staff. I am indebted to them for most faithful and efficient service.

I am, sir, very respectfully, your obedient servant,

C. C. AUGUR,

Brigadier General, Commanding.

The ADJUTANT-GENERAL,

Military Division of the Missouri, Chicago, Ill.

4, 4 A.—REPORT OF MAJOR-GENERAL HANCOCK.

HEADQUARTERS MILITARY DIVISION OF THE ATLANTIC,
Governor's Island, New York, October 31, 1881.

SIR: In accordance with the instructions contained in your letter of September 16, 1881, I have the honor to transmit the following report of operations within the Military Division of the Atlantic during the past year:

The geographical boundaries of the division remain unchanged. It is divided into two military departments, east and south, the former being under my immediate command, with headquarters at Governor's Island, N. Y., and the latter under command of Brevet Brig. Gen. Henry J. Hunt, colonel of the Fifth United States Artillery (with headquarters at Newport Barracks, Ky.), since January 6, 1881, at which date he succeeded Brig. Gen. C. C. Augur, the latter having been assigned to the command of the Department of Texas by General Orders No. 84, of December 18, 1880, from the headquarters of the Army.

The establishment of the Military Division of the Gulf and the Department of Arkansas in December, 1880, under orders from the War Department, detached from this command the States of Arkansas and

Louisiana. The division and department named were, however, abolished by General Orders No. 41, of May 6, 1881, from the headquarters of the Army, which restored the boundary lines of the Military Division of the Atlantic to those in force at date of my last annual report.

The aggregate of troops serving in the Division of the Atlantic on 30th September, 1881, was, by the returns of that date, as follows:

	Commissioned officers.	Enlisted men.
Headquarters Division of the Atlantic.....	11	13
Department of the East, Division of the Atlantic	244	1,456
Department of the South, Division of the Atlantic.....	82	529
Total	337	2,398

(Slight increase over last year.)

At this date the regiments stationed within the division are the same when I made my last annual report, viz, the First, Second, Third, and Fifth Artillery, and the Tenth United States Infantry. The First Artillery, however, is under orders to change station to the Division of the Pacific, to be replaced in the Department of the East by the Fourth United States Artillery. The movement is expected to commence at once, under General Orders (75) of this year, from the headquarters of the Army, and my orders based thereon, already promulgated. The Third and Fifth Regiments of Artillery are, also, by the same orders, to interchange stations, the former going to the Department of the South, and the latter coming to the Department of the East. The movement of these regiments has already commenced, and will be conducted to a termination as quickly as transportation facilities will permit. Every endeavor has been made in executing the interchange of these regiments to economize in the matter of transportation, &c.

Under instructions from the General of the Army the garrison at Washington Barracks, D. C., was increased in the month of February by the transfer to it of the headquarters light battery and three foot batteries of the Second United States Artillery, constituting, at that post, a garrison of a light battery and four foot batteries. (Its garrison theretofore had been two foot batteries of the Second United States Artillery.) For the purposes of this increase one battery (C, of Second Artillery) was drawn from Fort Johnston, N. C. (thereupon discontinued as a military post and transferred to the Engineer Department, and regimental headquarters light Battery A and Battery D, Second Artillery, from Fort McHenry, Md. At the same time the garrison of Fort McHenry was re-enforced by Battery I, Second Artillery, from Fort Ontario, N. Y., of the latter being discontinued as a garrisoned post, and left in charge an ordnance sergeant. Battery L, of the Second Artillery, heretofore stationed in the Department of Texas, and subsequently in the Department of the South, and now at Yorktown, Va., under orders to proceed to Fort McHenry, which will give that post its usual garrison of three batteries.

In my last year's report I mentioned that it was proposed to assign Batteries E, G, and L, Second Artillery, then under orders to return to command from the Division of the Missouri, the two former (E and G) to Little Rock Barracks, and the latter (L) to Jackson Barracks, La. This was carried out in November, 1880, and at this date Battery E (Hann's) is stationed at Little Rock Barracks, Battery G (Woodruff's) at a recently taken post at Newport Barracks, Ky., relieving Battery D (Fifth Artillery (Guenther's), ordered to the North in the recently effected interchange of artillery regiments, and Battery L (Rodger's), withdrawn from Jackson Barracks to Atlanta and thence to Yorktown,

is under orders to take post at Fort McHenry, Md., as heretofore stated.

Although the troops in this command have not during the past year been called upon for active service in the field, they have been required for the performance of duties, some of them delicate in their nature, and all of them necessitating promptness and efficiency. I may mention the inauguration ceremonies at Washington last March, the special duties required at Washington, Long Branch, and Cleveland, Ohio, in connection with the assassination, death, and funeral obsequies, &c., of the late President Garfield, and the recent Centennial Celebration at Yorktown, Va., which imposed much extra service upon the forces of my command; and I am gratified to be able to state that upon all of the occasions referred to, the duties were intelligently and efficiently performed by both officers and men, and in such manner as to reflect credit upon the service. The recent assemblage of about 1,000 regular troops in camp at Yorktown (under the command of Col. H. B. Chittenden, Tenth United States Infantry, for participation in the Centennial Celebration at that point, afforded an excellent opportunity for the instruction of the troops and the practice in drill, and equally necessary experience of field service obtained there, had a decidedly beneficial effect. Having no cavalry in this command, it was found necessary to send to Yorktown a detachment consisting of two commissioned officers and 25 men, with same number of horses (from Light Battery K, First United States Artillery, at Fort Adams, R. I.) for mounted service during the observances at that point. This detachment was returned to Fort Adams the 24th instant.

In addition to the regular troops, there were present on that occasion a naval brigade (from the fleet at Yorktown) numbering about 1,000 officers and men, commanded by Capt. R. N. Meade, United States Navy, and about 7,500 State troops, from the following States, viz: Georgia, New Jersey, Delaware, Pennsylvania, Connecticut, Massachusetts, Maryland, South Carolina, New Hampshire, Virginia, New York, North Carolina, Rhode Island, Vermont, Kentucky, and Michigan, making about 10,000 men. (I inclose an approximate return of these State troops so far as they reported to me.) The entire force passed in review before the President of the United States on the 20th instant making a most creditable appearance; the marching and general military appearance of the State troops being exceedingly good.

The Yorktown ceremonies are of so recent occurrence that it seems useless to enter upon a detailed account of them here. The occasion has been one of such public interest, and the details of the ceremonies so fully and widely disseminated, that a brief reference to them seems all that is necessary at this time. During the Centennial Celebration there, I issued a series of orders from my headquarters which referred only to that event and matters connected therewith, and I take occasion to inclose herewith a full file of the same.

The light batteries of the Second and Third United States Artillery, both of which marched to Yorktown (the former from Washington Barracks, D. C., and the latter from Fort Hamilton, New York Harbor) are now on their return march to their stations; and of the four foot companies left at that point to guard public property, &c., three have been returned within the past few days to their stations, and the remaining company will be withdrawn as soon as the Quartermaster's Department has made disposition of the government property there.

It seems proper to observe that the large encampment at Yorktown (consisting of upwards of 1,400 tents) for the accommodation of 10

ops. was mainly established by the labors of the regular troops, under supervision of Lieut. Col. William P. Craighill, United States Engineers. It was also broken up and the public property disposed of by the same forces.

In the Department of the South the posts at present garrisoned are, McPherson Barracks, Ga.; Little Rock Barracks, Ark.; Fort Brooke, Tampa, Fla. (summer post for the garrison of Key West Barracks, Fla.), and Newport Barracks, Ky. The companies at Fort Barrancas, Fla., and Jackson Barracks, La., having been withdrawn on the approach of the yellow fever season last spring and temporarily quartered at McPherson Barracks. This year, however, the South has been unusually free from that disease, but one or two cases having been reported among the troops.

Recent orders from the honorable Secretary of War directed the abandonment of McPherson Barracks and the sale of the buildings thereat, and the distribution of troops to other posts. These orders are in due process of execution, and, taken in connection with General Orders No. 75, current series, from the headquarters of the Army, above referred to, causing changes in the stations of artillery regiments, will result in giving the Department of the South the following garrisoned posts: Mount Vernon Barracks, Ala.; Jackson Barracks, La.; Fort Barrancas, Fla.; Key West Barracks, Fla. (summer post Fort Brooke, Tampa, Fla.); Little Rock Barracks, Ark.; and Newport Barracks, Ky.

I enclose the several reports of the chiefs of the staff corps at these headquarters, exhibiting the operations of their respective departments during the period for which they are made. They afford evidence of the attention to all essential details, and exhibit a proper regard for economical administration of the public funds which some of them have been required to disburse.

Inspection duty in all branches of the service within this division has been thoroughly performed during the year, and with beneficial results. The reports of the inspectors will be found interesting, and their several commendations and remarks are considered judicious and well-timed. I call attention to those of Major Arnold in regard to the want of uniformity in the matter of knapsacks or clothing bags and haversacks, of which, it appears, there are now five or six distinct patterns in use, one company alone having two or three styles. I doubt not the attention of superior authority has already been directed to this subject, and that measures which have been taken to insure uniformity in other directions will, in time, extend to all essential portions of the soldier's equipments. I agree with the inspector that the new helmet is a very decided improvement in the dress and soldierly appearance of officers and men.

Shooting practice has this year been pursued with unabated zeal in this command, and the report of Captain Litchfield, Second United States Artillery, on special duty at these headquarters as instructor in this branch of the service will be found interesting. Owing to the special duties required of the troops at Yorktown, &c., it was thought best to postpone until November, the competitions prescribed by General Orders No. 44, current series, from the headquarters of the Army, to take place during October. At this date orders are being made to assemble, far as practicable, the marksmen at Governor's Island, so that the competitions may yet take place. Although the troops at most of the posts labor under disadvantages in regard to ranges and other essential matters, the several printed reports of practice, issued during the year, afford evidence of material improvement, and in some cases of great per-

fection. I take this occasion to say that, in my opinion, the government cannot be too liberal in its appropriations for instruction and practice in this important branch, and for perfecting the arms which should be placed in the hands of the marksmen of the Army.

The discipline and general condition of the troops, as reported to me, are satisfactory. The many improvements made of late in the matter of post schools, reading rooms, lighting company quarters, &c., have all had a beneficial effect, and at no time within my recollection has the condition of the soldier been more satisfactory, or his mental, moral, and physical wants been given more intelligent consideration.

Instruction in all the military branches is carried out, so far as the small garrisons at many of the posts will permit, and, notwithstanding some drawbacks, there has been improvement in this direction. It may be stated here that it is proposed, in the near future to discontinue several posts in the Department of the East (now occupied by one or two companies only), and transfer their garrisons to other posts; this in the direction of economy, and the concentration of the troops in large bodies.

In accordance with instructions, this report and all of its inclosures are submitted in duplicate.

I am, sir, very respectfully, your obedient servant,

WINF'D S. HANCOCK,

Major-General, Commanding.

The ADJUTANT-GENERAL, U. S. ARMY,

Washington, D. C.

P. S.—A photograph of the encampment at Yorktown is now in course of preparation, and when finished, it is my intention to forward copies of the same for file with this report.

List of inclosures to annual report.

1. Report of inspector-general of division.
2. Report of inspector general, Department of the East.
3. Report of judge advocate of division.
4. Report of chief quartermaster of division.
5. Report of chief commissary of subsistence of division.
6. Report of medical director of division.
7. Report of chief paymaster of division.
8. Report of Capt. H. G. Litchfield, Second Artillery; on special duty in connection with rifle practice.
9. Report of commanding general, Department of the South.
10. Approximate return of State troops encamped at Yorktown, Va.
11. File of General Orders issued at Yorktown.

4 B.—REPORT OF BREVET BRIGADIER-GENERAL HUNT.

HEADQUARTERS DEPARTMENT OF THE SOUTH,

Newport Barracks, Ky., September 30, 1881.

SIR: I have the honor to submit a report of the condition and operations of the Military Department of the South, for the year commencing October 1, 1880.

Inclosed is a chronological list of the principal movements of troops and of events that have occurred during the year, marked A.

During the months of May and June I inspected personally McPherson Barracks, Atlanta, Ga.; Charleston Barracks (late arsenal); the Citadel, and Forts Moultrie and Sumter, Charleston Harbor, S. C.; Oglethorpe Barracks, Savannah, Ga.; Fort Marion and Saint Francis Barracks, Saint Augustine, Fla.; Fort Brooke, Tampa Bay, Key West Barracks; Fort Taylor and Fort Jefferson, Florida.

Enclosed will be found the reports of the garrisoned posts within the department made by their respective commanding officers.

As to those not garrisoned—

At Fort Moultrie I found the arsenal grounds and buildings at Charleston, which have been turned over for educational purposes to the Rev. Dr. Porter's school, in excellent condition. The buildings are well cared for, are in admirable condition, and have been well adapted to the purpose for which they were transferred to the school. The grounds have been greatly improved and a thorough system of drainage commenced.

The condition of the school, and the extent to which it has been and may be enlarged, afford ample proof that the same value of public lands and property could not have been more profitably devoted to the cause of education than this has been. The conditions upon which the transfer was made have been carefully and conscientiously fulfilled.

The Citadel at Charleston is in rather a dilapidated condition, and although well cared for by Ordnance Sergeant McMahon, in charge, will continue to deteriorate if left ungarrisoned.

Fort Sumter and Fort Moultrie are in the hands of the engineers. The ordnance and ordnance stores formerly at the Citadel and arsenal have been transferred to Fort Moultrie, and are well cared for by Ordnance Sergeant Flood. It is much to be desired that additional grounds be secured adjacent to Fort Moultrie, and barracks and quarters for a permanent peace garrison for Charleston Harbor be constructed thereon. At Oglethorpe Barracks I found in very good condition; some of the buildings have been turned over to the engineers and are usefully occupied. The other buildings are well cared for by Ordnance Sergeant Campbell. A hurricane recently did much damage to the barracks and the buildings at Fort Pulaski. The necessary steps have been taken to restore or repair them so far as the wants of the service require.

At Key West Barracks and Fort Taylor are in good condition and in good order. The garrison having been moved to Fort Brooke the barracks were placed under the charge of a keeper employed for the purpose. The insufficiency of the sum allotted for incidental expenses compelled his discharge and replacement by a selected non commissioned officer detailed from the garrison of Fort Brooke, although it is understood that there is yellow fever in Key West.

Fort Jefferson, a dependence of Key West, is in much better order than I expected to find it. The quarters and barracks are sound and in good order, excepting that the ceiling has fallen in one or two sets of officers' quarters. The armament and large supply of ordnance stores are kept in excellent condition by the ordnance sergeant.

At Saint Francis barracks I found the roof of the large building which furnishes quarters for all the officers so leaky as to endanger the building. It has been ordered to be new shingled. The cemetery is in good order. It contains the remains of all the officers and soldiers who died or were killed in the Florida war, whose bodies could be collected. The remains were buried under three large mounds of earth, and a monument erected, under the orders of Major-General Worth, at the close of the Florida war. Measures have been taken to have this be a national cemetery.

At all the garrisoned posts I found the troops well instructed and in

good discipline. In some cases the facilities for target practice are good. This is especially the case as regards the field battery station at McPherson Barracks.

I concur in the views of the commanding officer, Fifth Artillery, Lieutenant Colonel Hamilton, as to the stationing of field batteries of instruction singly at the headquarters of regiments. It increases the expense of the arm, makes emulation impossible, and in many ways, in actual condition, injures the tone and harmony of the service.

The garrisons of Jackson Barracks and Fort Barrancas were removed in June at the approach of the yellow fever season to McPherson Barracks for the summer.

McPherson Barracks, if the post is to be maintained, requires large repairs. Estimates have been forwarded with this view. They are hardly in condition to make troops comfortable in winter, and lie far within the limits of the city of Atlanta, in a position very unfavorable for the health, morals, and discipline of troops.

If a post is to be maintained at or near Atlanta a large space should be acquired and better buildings constructed. As a *sanitarium* is doubtful if the public grounds at Mount Vernon, Ala., would not be better.

Inclosed are the reports of the post commanders and chiefs of administrative departments serving at these headquarters, with a copy of recapitulation of last monthly return of this command, to which I respectfully refer for more detailed information.

I would respectfully, in closing, call attention to the fact that the Fifth Regiment of Artillery has occupied the Gulf stations for nearly consecutive years, the ordinary tour being three, and that since the close of the war, in 1865, it has spent ten years out of the sixteen in the Southern States. The result has told on the health and condition of the officers, men, and their families. In another respect it has caused great hardship. The frequent movements to which the troops have been subjected, not only from ordinary calls of service, but on account of sick seasons, has, by the great expense they impose, impoverished officers and men having families. I respectfully call attention to this subject and recommend as a matter of justice the transfer of the regiment to northern station.

I have the honor to be your obedient servant,

HENRY J. HUNT,

Brevet Brig. General, Commanding

ASSISTANT ADJUTANT-GENERAL,

Division of the Atlantic, Governor's Island, New York Harbor.

5.—REPORT OF MAJOR-GENERAL McDOWELL.

HEADQUARTERS MILITARY DIVISION OF THE PACIFIC
AND DEPARTMENT OF CALIFORNIA,

Presidio of San Francisco, Cal., October 14, 1880.

SIR: I have the honor to report as follows of the service in this division since the last annual report of October 6, 1880:

DEPARTMENT OF CALIFORNIA.

Movement of troops.

September, 1880.—Captain Wagner, First Cavalry, with detachment Troop C, First Cavalry, on scout from Fort Bidwell, Cal., to vicinity

Siem's Mountain, Oregon, September 7 to 17, inclusive. Distance marched, 273 miles.

Second Lieut. J. A. Hutton, Eighth Infantry, with detachment of 12 enlisted men, Troop G, First Cavalry, on scout from Fort McDermitt, Nev., to Three Forks of Owyhee River, Oregon, September 1 to 9. Distance marched, 120 miles.

October, 1880.—A party of 2 non-commissioned officers and 13 privates, Troop G, First Cavalry, on scout from Fort McDermitt, Nev., to Granite Mountains, near Camp McGarry, Nev., from October 5 to 15. Distance marched, 180 miles.

November, 1880.—Second Lieut. J. Pitcher, First Cavalry, with detachment of Troop G, First Cavalry, on scout from Fort McDermitt, Nev., to Three Forks of Owyhee River, Oregon, from November 9 to 19. Camped for several days, and hunted over country in all directions. Distance marched, 138 miles.

July, 1881.—Second Lieut. J. Pitcher, First Cavalry, with detachment of 22 enlisted men, Troop G, First Cavalry, on scout from Fort McDermitt, Nev., from June 22 to July 1, inclusive, in vicinity of King River Valley, Oregon. Rumored Indian troubles in that region pronounced false. Distance marched, 175 miles.

Battery K, Fourth Artillery, transferred from Fort Point, Cal., to Fort Canby, W. T., left Department of California, *en route* for latter post, July 6.

Battery G, Fourth Artillery, transferred from Fort Canby, Department of the Columbia, arrived and took station at Alcatraz Island, Cal., July 9.

Battery L, Fourth Artillery, transferred from Alcatraz Island, Cal., arrived and took station at Fort Point, Cal., July 9.

Battery F, Fourth Artillery, transferred from Fort Point, San José, Cal., to Fort Canby, W. T., left Department of California, *en route* for latter post, July 15.

Battery M, Fourth Artillery, transferred from Fort Canby, W. T., arrived and took station at Fort Point San José, Cal., July 16.

Capt. R. F. Bernard, First Cavalry, with Second Lieut. J. Pitcher, First Cavalry, and 25 enlisted men, Troop G, First Cavalry, on scout through country north of Fort McDermitt, Nev., from July 12 to 28. Distance marched, 220 miles.

August, 1881.—Company H, Eighth Infantry, transferred from Angel Island, Cal., July 21, arrived and took station at Fort Bidwell, Cal., August 3. Distance marched from Reno, Nev., on Central Pacific Railroad, 205 miles.

Company D, Eighth Infantry, transferred from Fort Bidwell, Cal., August 5, arrived and took station at Angel Island, Cal., August 15. Distance marched, 205 miles.

September, 1881.—Troop G, First Cavalry, left its station, Fort McDermitt, Nev., for field service against hostile Apaches in Department of Arizona, September 5.

Troop I, First Cavalry, left its station, Fort Halleck, Nev., for field service against hostile Apaches in Department of Arizona, September 6.

A detachment of Company G, Eighth Infantry, left Fort Halleck, Nev., September 4, and arrived and took temporary station at Fort McDermitt, Nev., September 8.

Companies B and K, Eighth Infantry, from Benicia Barracks, and Companies C, D, and F, Eighth Infantry, from Angel Island, Cal., left under command of Lieutenant-Colonel Wilkins, Eighth Infantry, for

field service against hostile Apaches in Department of Arizona, September 5.

A detachment of 10 enlisted men, Battery A, Fourth Artillery, under command of First Lieut. Joseph Garrard, Fourth Artillery, left Fort Point, Cal., September 12, to take temporary station at Fort Yuma, Cal.

Troop C, First Cavalry, left its station, Fort Bidwell, Cal., for field service against hostile Apaches in Department of Arizona, September 15. Marched to Reno, Nev., 205 miles, thence by railroad to Lathrop, Cal., where it arrived September 22, and remained in camp till the 3d October, when it was sent to Willcox Station in Arizona, on the application of the department commander.

Troop M, First Cavalry, brought into the department in expectation it might be needed in Arizona, left its post at Walla Walla, W. T., the 6th September, came by rail to Roseburg, thence marched to Redding, thence by rail to Lathrop, where it arrived on the 22d September and remained till the 3d October, when, together with Troop C, it was sent to Arizona, on the application of the department commander.

October 3, 1881.—Batteries C and L, Fourth Artillery, Fort Point, and Battery H, same regiment, Presidio of San Francisco, Cal., were sent to Willcox Station, A. T., by special train, on the application of the department commander.

On account of economy and efficiency I had hoped to be able to dispense with the post of Fort McDermitt, but was unable to do so, because of the representation both of the Indians and whites.

I again ask attention to the recommendation in my former report that Fort Independence, which has been abandoned as a military station, be sold.

It is now in the charge of an agent of the quartermaster's department, is no longer needed for military purposes, and the reservation buildings should be sold, both as a matter of economy to the military service and of benefit to the settlers.

I send herewith, marked D, a report of the senior inspector of inspection of Fort Gaston, and of a report sent in by the post commandant of the Indians on the Klamath reservation near the post.

The thorough repairs and changes in quarters, barracks, stables, and store-rooms at the posts of Fort Point, Presidio, Fort Point San Joaquin, Alcatraz and Angel Islands, are nearly completed, and it is hoped will be so entirely by the end of the fiscal year. The buildings at Yerba Buena will soon be removed to the other posts, as authorized by the Secretary of War.

I forward herewith, in duplicate, the following annual reports concerning this department and the Division of the Pacific:

1st. Report of Deputy Quartermaster General Rufus Saxton, chief quartermaster of the department and division.

2d. Report of Assistant Commissary General C. L. Kilburn, chief commissary of subsistence of the department and division.

3d. Report of Deputy Paymaster General Rodney Smith, chief paymaster of the department and division.

4th. Report of Surgeon Charles Sutherland, medical director of the department and division.

5th. Report of Assistant Inspector-General J. C. Breckinridge, chief inspector-general of the department and division.

6th. Report of Capt. William A. Jones, Engineer Corps, engineer officer of the department and division.

7th. Report of Capt. B. B. Keeler, A. D. C., acting judge-advocate of the department.

8th. Report of First Lieut. C. P. Miller, Fourth Artillery, acting signal officer of the division and department.

DEPARTMENT OF THE COLUMBIA.

I submit herewith the annual report of the general commanding the Department of the Columbia, together with the papers he transmits.

In a previous report the department commander submitted his views as to the proper place for the post needed to the west of Fort Coeur d'Alene, and which, at one time, it was intended to establish at the foot of Lake Chelan. The funds to build this post will require Congressional action, and I ask the attention of the department to it that the necessary appropriations may be obtained.

DEPARTMENT OF ARIZONA.

I transmit herewith the report, with its accompanying papers, of the general commanding the Department of Arizona. His report is made while absent from his headquarters, on account of Indian hostilities, which, as he says, was the cause of its not being "more extended."

Hostilities with the Apache Indians.

Early in September a report came up from Arizona that Colonel Carr, Sixth Cavalry, commanding at Fort Apache—who had left his post and marched with the bulk of his command to the White Mountain Apache Indians—had been attacked, his command exterminated, and, subsequently, Fort Apache taken. While it was not believed the fort had been captured, the reports indicated the troops had met with disaster; and the case was the more serious because communication was partially cut off from the rest of the Department of Arizona.

The fort is in the extreme eastern portion of the Territory, high up in the mountains, and the only road leaving to it had been damaged by recent storms which had washed out the portions going up the rocky cañons and made it impassable even for pack mules.

On September 5 word came from Fort Thomas—the post nearest to Fort Apache—that while Colonel Carr's command and the fort had been attacked, he had repulsed the Indians, with considerable loss in men and material, had regained the fort, resisted their attack upon it, and driven them from its vicinity.

General Willcox immediately left his headquarters at Prescott, went to Fort Thomas and took all measures in his power to provide for suppressing the hostilities in which he so unexpectedly found himself involved. On his application the available cavalry and infantry in the Department of California were sent him, and as the means of supplying Fort Apache had, for the moment, been interrupted by the causes beforementioned, he was compelled to ask that supplies and ammunition, and, subsequently, reinforcements might be sent to Apache from New Mexico, in the neighboring Department of the Missouri.

The movement of troops ordered by General Willcox seemed, at first, to have so overawed the hostiles that many of them surrendered at Apache and the Indian Agency, and it was fast becoming more a question of punishment by power of law than of operations in the field; when for reasons not yet fully or satisfactorily explained, most of the

prisoners at the Indian agency broke away and are still at large; and concurrently with their escape, if not because of it, another band, which had been in no way connected with the disturbance at Apache—the Chiricahuas—took the field and commenced hostilities, which are still maintained. The only engagements since the attack on Carr, were one with troops under Major Sanford, and one by those under Captain Bernard, First Cavalry, acting under the orders of General Willcox.

The outbreak of the White Mountain Apaches was so unexpected and the cause so obscure, that on the 12th ultimo I caused the following inquiry to be made of the department commander:

The War Department and the country will want to know everything connected with the commencement of the hostilities between the White Mountain Apaches and the troops under Colonel Carr; and the division commander directs that you make full investigation, and report at as early a day as possible, and set forth: (1) whose order and at whose instance Colonel Carr marched from Fort Apache to the village or camp of the Apaches in question? (2) What was the object to be gained? (3) In what way was this object effected or attempted? (4) What is supposed to be the immediate, and what the remote, cause of the attack? (5) In what way was the attack made and resisted, including in this the subsequent attack on the fort?

General Willcox has been so occupied and so separated from the necessary to be consulted, that he has not, at this date, been able to send the desired information. It may come before this report is mailed; if not, it will be forwarded as soon as it is received.

I send herewith copies of communications to and from these headquarters, concerning these hostilities, marked A.

In the absence of more detailed reports from those most immediately concerned, I feel unwilling to pass upon the events of the last few weeks in Arizona; but as I am obliged (by orders from Army headquarters) to send this annual report off before these reports come in, I venture to submit the following:

1st. As to the outbreak.

I ask attention to two papers herewith from Colonel Carr, dated August 17 and September 5. The first gives an account of his "talk" with the White Mountain Indians, and the second an account of his seizing the medicine man and of the consequent attack on his command.

Colonel Carr states he acted pursuant to orders "from commanding general" [of the Department of Arizona], "dated August 13, to arrest Indian doctor Nokay Delkinne as soon as practicable, and formal request from agent, dated August 14, to arrest or kill him, or both."

In Colonel Carr's report to department headquarters of August 17, he says:

I wish it to be observed that I did not "report the Indian doctor as stirring up hostilities" (see your telegram of August 13 ordering his arrest), but merely report statements and the inferences of the interpreter to the department commander, to be taken for what they might be worth (see my telegram of August 1). I have, however, no doubt that it was a grave situation, and that it was incumbent upon us to take some steps. The Indian agent also is very positive on the subject.

But whatever may have been the cause for asking and ordering, and however imperative may have been the necessity for the arrest of the medicine man, it is plain, from Colonel Carr's notes, that the White Mountain Apaches were taken by surprise when he marched from the fort with the bulk of his command to arrest him. Those notes show that they had been disturbed by idle, mischievous, and false reports; were apprehensive of danger from the troops; uneasy and restless, but not then hostile. The fact of the troops finding the medicine man with his people in their homes, where they had been planting corn, shows that, whatever may have been their ulterior plans, they were not then for war (see report of Surgeon Byrne herewith, marked B).

I cannot concur, therefore, in denouncing their conduct as treacherous. (Except the scouts, who, forming part of the military force and being subject to the military law, are in a different case from the other Indians.) These Indians simply made war upon the troops in retaliation for the arrest of their leader, an arrest made by military force; and they made the war openly.

Whether or not they had a just cause, or, if a just one, whether a sufficient cause for war is another question, and one of which they are the judges. We have for over a century made treaties, made war, and made peace with the Indian tribes, and I see no difference whatever in the case of the war with these Indians than that made heretofore with the Sioux, Bannocks, Nez Percés, or Seminoles, &c. What we may judge best as a question of public policy to do with this tribe as their conquerors is another question; but I think they are entitled to the same treatment as other hostile Indians, both in the way the war against them shall be carried on and their treatment after their surrender or capture.

Colonel Carr says, August 17:

I had directed Lieutenant Cruise to take in the guns of his scouts after Sunday morning inspection, on the 14th, and to say that he would keep them in his office out of the way.

They have been kept there much of the time heretofore. The scouts do not like it, and this time considered it a sign of distrust, but I could not reconcile it to my duty to have them keep their arms when there was so much and so general belief in their disposition to treachery. It is, however, believed that they intend to hold on till after the next pay day, which will also agree with the time when the corn will be ripe.

The temper of his Indian scouts being such as to make it his duty to disarm them, thus causing them to feel they were distrusted; the belief in their disposition to treachery being general, and that they could only be relied on till the next pay day; it was injudicious, as events have shown, in Colonel Carr to take them, with arms in their hands, to aid him in the arrest of one of their own leaders.

2d. As to the prosecution of the war.

Colonel Carr having regained his post with the loss, in killed and wounded, of between a fifth and a sixth of his force, and the loss of most of his horses and ammunition, it was to be expected he would not feel able to cope with the Indians with less than he had when they attacked him. He was so placed, as before mentioned, that he could for the moment neither be supplied nor re-enforced from Arizona. He is a gallant and active officer, and there can be no question was most anxious to resume offensive operations.

The department commander labored under the disadvantage of having this portion of his command so placed that he was obliged to ask to have it supplied and re-enforced by another department commander; and the changing character of the contest and the interruption of his communications necessarily caused him to vary in his demands; but he was active, zealous, and prompt in the discharge of his duties, and impatient at the delays which the distance he was from supplies and troops imposed on his movements.

Before the special intimation from the General of the Army was received, as well as after, General Willcox was left free to act on his plans to suppress the hostilities, and subsequently, in conformity with the emphatic orders of the General of the Army, the sole conduct of active operations was devolved on Colonel McKenzie, Fourth Cavalry, who has had, for some time, exclusive command of all the forces in the field.

As much unfavorable comment has been made, and impatience shown that these hostilities were not put down immediately, and this soon after they broke out, I think there is misapprehension as to the extent and character of the Territory of Arizona, and as to the habits of warfare of

iss Indians, and I beg to append to this a special report made on the subject in 1866 (herewith marked C) which, in a large degree, applies to the present case; for while the railroads have shortened the time of getting troops and supplies into Arizona, the manner of using them when there has not changed.

It is not that the number of hostile Indians at any time can be great, but that their nature, and that of their country, give them great facilities for attack and escape.

In justice to those who have the task of dealing with this question, I ask a comparison between this outbreak and that of the Modocs.

The Modoc country was more accessible, and nearer supplies than these Apaches, yet the Modoc war began December 7, 1872, and was not ended until June 1, 1873.

The later dispatches indicate that the hostiles are making for Mexico, and the officer in pursuit has declared his intention of following them across the line, unless prohibited by superior authority. His dispatch was duly forwarded to Washington, but no orders have, as yet, been received with respect to it.

As bearing on this question of inviolability of neutral territory, I call attention to the following extract of a general order issued by the War Department in 1865, in the case of certain Confederates tried for violation of the laws and usages of civilized war, in which it was discussed:

It is true that publicists agree that, of all "principles of public law, there are more sacred than those which secure the immunity of neutral territory from the use of acts of hostility by a foreign power," and that "the law of nations forbids the use of neutral territory for hostile purposes, and declares that the rights of war may only be exercised within the territory of the belligerents, on the high seas, or within the jurisdiction of any other power." Yet, notwithstanding, had the act and the fate of the prisoners been made within the limits claimed by the neutral power of Grenada, it would have been a less departure from the rule, and more clearly an exception to it than was made by General Jackson in the invasion of the then Spanish province of Florida in 1818, or by Sir Allen McNab in the invasion of the State of New York, at Schlosser, in 1837. And General Jackson's act was defended by John C. Adams, sustained by our government as an act of self defense, and acquiesced in by the Government of Spain; and the invasion of New York was approved by the British Government as having been "one in the strictest sense of self defense, rendered absolutely necessary by the circumstances of the occasion for the safety and protection of Her Majesty's subjects, and justified by the same motives and principles which govern similar and well-known occasions have governed the conduct of illustrious officers of the United States." (Mr. Fox to Mr. Webster, December 19, 1840.)

In the course of the negotiations to which this case gave rise, and before the Government of Great Britain was acquiesced in by the United States, as finally it was, our negotiators at London, Mr. Stevenson, and two of our Secretaries of State, Forsyth and Welles, though denying the applicability of it to the case of the *Caroline* at Schlosser, acquiesced in the exception to the rule of inviolability of neutral territory claimed by Great Britain.

When the Apaches pursued by our troops are, from whatever cause, suffered to enter Mexico and remain there with arms in their hands, so as to return and renew their attacks on our people, the act of the Government who should follow them must, in all justice, be claimed to be "one in the strictest sense of self-defense rendered absolutely necessary by the circumstances of the occasion for the safety and protection" of our citizens.

The latest dispatch received from Colonel Mackenzie, through General Willcox, is to the effect that there are no considerable bodies of hostile Indians now in Arizona, that most of the White Mountain Apaches have surrendered, and that the Chiricahuas have gone to Mexico.

I have the honor to be, very respectfully, your most obedient servant,

IRVIN McDOWELL,

Major-General, Commanding Division and Department.

The ADJUTANT-GENERAL OF THE ARMY,

Washington, D. C.

5 a.—REPORT OF COL. E. A. CARR, SIXTH CAVALRY.

[Telegram]

PRESIDIO OF SAN FRANCISCO, September 5, 1881.

ADJUTANT-GENERAL, Washington, D. C.:

Following just received:

FORT APACHE, September 2—8.30 p. m.

ADJUTANT-GENERAL, Whipple Barracks, Ariz.:

Pursuant to orders from the commanding general, dated August 13, to arrest the Indian doctor, Nockay Delkinne, as soon as practicable, and formal request from agent dated 14th, to arrest or kill him, or both, I first hoped to arrest him when he came to hold his dances and incantation here, but he did not keep his appointment. I then sent two Indian scouts with message that I wanted to see him on Sunday, Aug. 28. I received an evasive answer from him, and next day marched with Troop D, E, Sixth Cavalry, and Company A, Indian scouts, the command numbering 6 officers and 79 soldiers and 23 Indian scouts. I reached his village on the 13th and arrested the medicine man. He professed entire willingness to come with me, said he would not try to escape, and there would be no attempt at rescue, but as we were making camp our own scouts and many other Indians opened fire upon us, killed Captain Hentig the first fire, and ran off the animals already turned out to graze. The medicine man was killed as soon as they commenced firing, and we drove them off after a short fight, in which we lost Captain Hentig, shot in the back by our own Indian scouts as he turned to get his gun; four privates killed, 1 sergeant and 3 privates wounded, 2 mortally.

After burying the dead, I returned as rapidly as practicable, arriving on the 31st. Some of the Indians had preceded me, and had killed 8 men on the road to Thomas. Next morning they made a demonstration against post and attacked it afternoon, but were repulsed. Our total loss is: Killed, Captain E. C. Hentig, Sixth Cavalry; 7 privates Troop D, Sixth Cavalry, and 1 private Troop E, Sixth Cavalry; 2 privates Company D, Twelfth Infantry. Wounded, First Lieut. C. G. Gordon, Sixth Cavalry, in being; 1 sergeant, Troop E, and 1 private, Troop D; and 45 horses and 10 mules killed, wounded and missing.

The command behaved with the utmost coolness and gallantry, and encountered danger, hardship, and fatigue with the greatest cheerfulness. In spite of the sudden and most treacherous nature of the attack in the midst of the camp, officers and soldiers spring to their arms and defeated their plan, massacre, and subsequently held this post and are ready for further service. We require 39 horses and 10 pack-mules. The officers here are Maj. M. A. Cochran, Twelfth Infantry; Capt. A. B. MacGowan, commanding Company D, Twelfth Infantry; First Lieut. C. G. Gordon, Sixth Cavalry, post quartermaster, wounded; William Stanton, commanding Troop E, who moved forward with skirmishers and most handsomely cleared the savages out of the bushy bottom close to camp; W. H. Carter, regimental quartermaster, Sixth Cavalry, adjutant, and commanding Troop D after Hentig's death; Second Lieut. Thomas Cross, commanding company A scouts, and afterwards Troop D, Sixth Cavalry, on the march and battle here; Assistant Surgeon Geo. McCreery, U. S. A., who, besides skilfully performing his professional duties, used a carbine effectively. My young son, Clark M. Carr, accompanied the expedition, and deserves to have his name mentioned in the dispatch. There are 45 civilians here who are assisting in defense of the post, and I am rationing such as require it. I armed the four prisoners, two of whom belong to the Ninth Cavalry. They fought bravely, and I shall recommend that their offenses be pardoned.

I received no dispatches from you later than August 14 till after my return; then came those of the 15th, which are the latest now at hand. I am confident that the Indians have been preparing for this outbreak for six months. Cooley, who is here says so; also Phapp, whose employé was killed. There have been only a few Indians around the post to day.

CARR, Commanding.

While lamenting of the death, by treachery, of Hentig and the men who fell with him, I am rejoiced to report that the massacre of Carr's command is not true.

MCDOWELL,
Major-General.

56.—COPIES OF ORDERS OF THE GENERAL OF THE ARMY TO GENERAL McDOWELL CONCERNING USE OF MACKENZIE'S RE-ENFORCEMENT.

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
 Washington, September 12, 1886.

Major-General McDOWELL,
Presidio of San Francisco, Cal.;

Having communicated to the General of the Army your 11.30 dispatch of yesterday, I have received the following in reply:

"Telegraph General McDowell he may use his Indian auxiliaries as he pleases, but I think that the troops must whip and punish the Apaches, or the effect will be bad. Every Indian who aided in the attack of General Carr's party must be killed, arrested and held for trial, the sooner the better. Then, if he has not troops enough, General Mackenzie will enter Arizona from the direction of Wingate or Craig. Every Indian outside of the San Carlos Reservation will be treated as hostile. There must be no half measures."

R. C. DRUM,
Adjutant-General.

HEADQUARTERS ARMY OF THE UNITED STATES,
 Washington, D. C., September 16, 1886.

General McDOWELL,
Presidio, San Francisco, California:

Your dispatch of last night is received, and on the theory that all of General Willcox's troops are in the field beyond the reach of the telegraph, converging on the trail, I will await results. General Mackenzie is concentrating at Fort Wingate, prepared to enter Arizona via Apache, and General Hatch is also at Fort Craig prepared to move toward San Carlos, and I await a call from you to give the orders to advance. I want this annual Apache stampede to end right now, and to effect that result I will send every available man in the whole Army if necessary. But of course it will be far better if General Willcox can do this without extraneous help. I must go to Fort Tanooga next Monday, and would like to act before I go, as it is confusing to have telegrams follow me for answer away from the records. I reiterate that no dispatch message went from me to General Willcox direct, and will not till the troops from Mexico are called on to help, when I may indicate a common commander for the forces employed against the Apaches.

W. T. SHERMAN,
General.

HEADQUARTERS ARMY OF THE UNITED STATES,
 Washington, D. C., September 17, 1886.

General I. McDOWELL,
Commanding Division, Presidio, San Francisco:

Your dispatch of yesterday is received, and I will instruct General Sheridan to direct Mackenzie's force to advance near to Fort Apache, to supply it amply with provisions and ammunition, and to hold his force ready to assist General Willcox, who will be allowed to punish the hostiles in his own way, and by his own troops if he chooses. In like manner General Hatch will have an auxiliary force at Craig. Let Willcox know these facts, and that the Apaches must receive such chastisement now that the repetition of the Carr affair will be impossible. Our accounts from that quarter are very meager.

W. T. SHERMAN,
General.

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
 Washington, D. C., September 22, 1886.

Major-General McDOWELL,
Presidio of San Francisco, Cal.:

The Secretary of War directs that you order at once Colonel Mackenzie's command and all other troops belonging to the Department of the Missouri, now in the Department of the Missouri, to be ready to move at once.

ment of Arizona, to return to their respective stations in the Department of Missouri. Acknowledge receipt.

By command of General Sherman :

C. McKEEVER,
Acting Adjutant-General.

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, September 28, 1881.

Major-General I. McDOWELL,
Presidio of San Francisco, Cal.:

The General of the Army is this minute back from Cleveland and has seen my dispatch of this morning and insists that General Mackenzie and his command remain at Apache, not limited to a district or post command, but held ready to act according to circumstances. He wants you to ascertain and report to him (General Sherman) if all the Apaches have surrendered and are in custody. Have they delivered up the horses and mules they gained, and the saddles and equipments left by Colonel Carr on the ground. General Willcox to remain in command of the department and see that General Mackenzie is supplied for vigorous action. As soon as General Sherman is satisfied that the Apaches are in fact subjugated and punished adequately he will order that command back to the Department of the Missouri.

The Secretary of War has heard read the above dispatch, confirms it, and modifies his orders of this morning accordingly. Copy of this dispatch has been furnished General Sheridan. Acknowledge receipt.

C. McKEEVER,
Acting Adjutant-General.

HEADQUARTERS ARMY OF THE UNITED STATES,
Washington, September 29, 1881.

General I. McDOWELL,
Commanding Division, Presidio of San Francisco, Cal.:

Your dispatch of 7.10 p. m. last night is received and your instructions to General Willcox are exactly right. Mackenzie's command has been hurried a long distance and must need rest. At Apache he is in good position for any eventualities. After he has had fair time to rest, and I am satisfied the hostile Apaches are prisoners, and that the moral effect intended by sending Mackenzie there has been fully accomplished, I will order him through you to return at leisure to his proper post. It would be well for the Apaches at the San Carlos Agency to realize that at any time the troops in Arizona can promptly be re-enforced from the north and east. Sooner or later some considerable number of these Apaches will have to be killed by bullets rather than by the rope.

W. T. SHERMAN,
General.

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, D. C., October 2, 1881.

General WILLCOX,
Grant, Ariz.:

Telegram yesterday received. The General of the Army says your dispatch should have been addressed to the adjutant-general of Division of the Pacific. He further desires me to say that he is awaiting an answer from General McDowell to a dispatch inquiring about the actual condition of affairs in Arizona; when he has that answer from General McDowell he will give orders to Mackenzie quick enough.

C. McKEEVER,
Acting Adjutant-General.

HEADQUARTERS ARMY OF THE UNITED STATES,
Washington, D. C., October 5, 1881.

General I. McDOWELL,
Commanding Division, San Francisco, Cal.:

Your dispatch of last night embodying several from General Willcox, in Arizona, is received. Colonel Mackenzie, with his specific command, was ordered to Arizona to

punish the Apaches for their attack upon Colonel Carr's command. The dispatch from General Willcox, department commander, were then so conflicting that I ordered Mackenzie's command to be marched to Fort Apache, and held entire so as to promptly return to New Mexico when called for, as it has been earnestly by General Pope, and approved by General Sheridan. New complications, as expected, have arisen in Arizona, which make the presence of Mackenzie's command still more necessary, although his troops belong to another division. It is my office alone to make the necessary orders which are. Colonel Mackenzie will report to and receive orders from the department commander, General Willcox, in Arizona, while serving in the department.

General Willcox will be ordered and instructed by you to give immediate command of the operations in the field against the hostile Apaches to Colonel Mackenzie, and of the necessary stores in that quarter, and will support him by all the means at his command to subdue the hostiles in that region, and the moment this is done to relieve Colonel Mackenzie, by an order in writing, when the latter will return to his proper command by easy marches.

W. T. SHERMAN,
General.

5 C.—REPORT OF MAJ. GEORGE B. SANFORD, FIRST CAVALRY.

WILCOX, ARIZ., October 5, 1881.

Major ARNOLD,

Acting Assistant Adjutant-General:

SIR: I have the honor to report that in obedience to telegraphic instructions received from your headquarters I left the San Carlos Agency Saturday, October 1, with 47 Apache prisoners belonging to the bands engaged in the Cibien fight.

The command marched the first day to Camp Thomas, 35 miles. On the morning of October 2, the command left Camp Thomas and moved toward Fort Grant; when about 4 miles from Cedar Springs a message was received from the department commander, General Willcox, who had gone on in advance, to bring up the command as rapidly as possible as the Indians had attacked a train close by Cedar Springs.

One company (Carr's) was left to guard the prisoners, and the other, Bernard's, was moved at a gallop to Cedar Springs, and thence out on the trail of the Indians. Two companies of the Sixth Cavalry, under Lieutenant Overton and Lieutenant Glass, who had been following the trail, came up at this moment and joined the column. About five miles south of Cedar Springs Lieutenant Overton's companies were moved to the front with a view to making a rapid march to Fort Grant, which was believed to be in danger. He had, however, only just passed to the front, when he came upon the bodies of several soldiers, evidently just killed, and almost immediately after, about 3 p. m., was rapidly fired on by the Indians concealed in the rocks and brush close by. Lieutenant Overton at once deployed his command as skirmishers and moved to the front dismounted. Captain Bernard at the same time deployed on the left and moved forward mounted. The firing became very rapid, the troops slowly driving the Indians, until at length the right of Bernard's and left of Overton's command connected, when the Indians abandoned their position in the lower rocks and took to the side of the mountains. The fighting commenced with great severity from this time until about 9 p. m., the bright moonlight greatly favoring the Indians, who were in shadow themselves, but could see every movement on the side of the troops.

About 8 p. m. Lieutenant Haden, Eighth Infantry, arrived from Grant with a small party of mounted recruits which had been sent at once by Captain Porter, Eighth Infantry, when the news of the fight was received. With this party also came Lieutenants Blockson, Sixth Cavalry, and Hubert, Eighth Infantry. At a few minutes before 9 the Indians were discovered to have moved off in the darkness of the cañons, and the command slowly withdrew to the plain bringing with them the dead and wounded.

Lieutenants Pitcher and Brown, with Dr. Adair, came up at this time with 25 men of Carr's company, bringing the welcome intelligence that General Willcox and staff, with the Apache prisoners, had taken the Eureka Springs road and were on their way into Grant. Great anxiety was still felt for their safety, as the Apache trail was found to strike in the direction they were traveling. This was relieved by the arrival of the command at Fort Grant by couriers from General Willcox, and later by the arrival of the whole party about 3 a. m. of the 3d.

The loss of the command was one man, Sergeant Buford, Company F, Sixth Cavalry, killed; Private John Hunt of F Company, Sixth Cavalry, wounded. Private William H. Humphreys and Isaac C. Renard, Company G, First Cavalry, wounded. Twelve horses, G Company, First Cavalry, killed and wounded, and two horses Company, and one horse, A Company, Sixth Cavalry.

The Indian loss is not known, but there is reason to believe that they were badly hurt.

Parties visiting the field have brought in two mules packed and other articles which they had abandoned in their hurried retreat, and signs of blood have been found on their trail.

The command reached Fort Grant after having traveled 80 miles in two days, guarded a large band of hostile Indian prisoners, and fought a very severe engagement, lasting six hours.

The Indians fought with great boldness and desperation, being evidently determined to hold their position long enough to get off their stock. On one occasion, about 8 p. m., they charged down on to Bernard's line, firing seven volleys, and approaching within 10 feet of the men. They were, however, finally driven back by the continued efforts of the officers and men, and from that time contented themselves with firing at longer range. The officers engaged were, Capt. R. F. Bernard, First Cavalry; Lieut. G. E. Overton, Sixth Cavalry; Lieut. J. N. Glass, Sixth Cavalry; Lieut. A. S. Bailey, Sixth Cavalry, and Lieut. S. C. Mills, Twelfth Infantry, commanding Indian scouts, all of whom are deserving of the highest commendation, as also the men of their command.

I would have rendered this report earlier, but my illness prevented.

Very respectfully, your obedient servant,

GEO. B. SANFORD,
Major, First Cavalry.

[First indorsement.]

HEADQUARTERS DEPARTMENT OF ARIZONA,
IN THE FIELD,
Tucson, Ariz., October 11, 1881.

Respectfully forwarded to headquarters military division of the Pacific as a part of my supplementary annual report. The Chiricahuas broke from the reservation on the night of the 29th and 30th ultimo. On the 30th Overton's and Glass's troops, Sixth Cavalry, were sent in pursuit, and next morning I started south, in which direction the hostiles were moving. I took with me Sanford's command to guard prisoners *en route*, and to be available in the southern part of the Territory, now stripped of all cavalry. As soon as we arrived at Cedar Springs and found the Indians in that vicinity, I ordered Bernard, of Sanford's Battalion, to move out and attack with his troop, and while he was examining trails, Overton and Glass arrived, when I ordered Sanford to assume command of the three troops and push in. The result is shown in this, Major Sanford's, report. Great praise is due Sanford, officers, and men for their gallantry, zeal, and persistent energy, which resulted in such a complete discomfiture of the Chiricahuas that they have not made another stand. Their own killed were concealed or carried off in the night, but bloody clothes dropped on the trails, and the large number of horses and mules found killed on the mountain side (twenty-three in number), proved how severely they must have suffered.

O. B. WILLCOX,
Brevet Major-General, Commanding Department.

1 A, 1.—REPORT OF BREVET BRIGADIER-GENERAL WHEATON.

HEADQUARTERS DEPARTMENT OF THE COLUMBIA,
Vancouver Barracks, W. T., August 2, 1881.

GENERAL: I have the honor to report that in compliance with War Department General Order No. 84, of 1880, I assumed command of the Department of the Columbia, and that I, to-day, relinquished the command of this department, pursuant to paragraph 6 of the same War Department order, to Brig. Gen. Nelson A. Miles, U. S. Army, submitting the following report of changes that have occurred since I assumed command:

During my temporary command of the department (from January 3, 1881, to date), the composition and stations of the personnel have remained substantially as at date of last report of my predecessor. The exceptions are the abandonment of Camp Howard, near Mount Idaho,

and the transfer of its garrison (Company K, Second Infantry, to Co. Spokane.

The transfer of Company E, First Cavalry, from Fort Lapwai to Fort Walla Walla, replaced by Company D, same regiment, from the latter named post. The exchange of Batteries G and M, Fourth Artillery from Fort Canby, at the mouth of the Columbia, to the harbor of San Francisco, replaced by Batteries F and K, same regiment, and the transfer of Company H, Twenty first Infantry, from Fort Canby to Fort Stevens, also at the mouth of the Columbia.

No extended operations of the troops have occurred during the period of my command; minor ones worthy of note are as follows: Captain Fennell's company, F, First Cavalry, is now absent from Boise Barracks, on scout into the Payette Lake region. No report has been received from it, but it is believed his command will not encounter any hostile Indians.

The commanding officer, Fort Townsend, has recently been instructed at the request of the Chief Signal Officer of the Army, to cause a reconnaissance to be made under the direction of Captain Jocelyn, Twenty first Infantry, of the country between Port Townsend and Cape Flatter looking to the future construction of a line of military telegraph between those points; a line which, when constructed, will give valuable results both in the interests of nomenclature and commerce.

Captain Bendire, First Cavalry, with a detachment of his Company (K), has been ordered, on the request of Professor Spencer F. Baird, of the Smithsonian Institution, favorably indorsed by the General of the Army, to make an examination of the celebrated "fossil beds" in the valley of the John Day River, Oregon.

Captain Bendire is now absent on that duty. No report has been received from him as yet, but when made it will doubtless be full of interest in a scientific direction.

On the 2d of May last, Capt. John A. Kress, Ordnance Department, chief ordnance officer of the department, assisted by Second Lieut. J. Patten, Twenty first Infantry, left here *en route* to make an examination of and report upon the newly discovered Wood River mining region in Idaho, regarding which there was considerable excitement and desire for definite knowledge in this section of country. Captain Kress returned in June and rendered his report, a copy of which has been transmitted to you, and which I beg to commend as a valuable paper.

First Lieut. T. W. Symons, Corps of Engineers, chief engineer of the department, has been furnished with all requisite facilities, and engaged since the latter part of May last upon the determination telegraphically of the longitude of three prominent points in this department, viz, Skane Falls, and Colfax, Wash. T., and Lewiston, I. T. His work, now just being completed at Lewiston, will be of great value in the future of this great section of the continent.

Captain Hunter, First Cavalry, with his company (H), is now engaged in the work of opening a new military wagon road from Fort Colville to Spokane Falls. This will be done at no, or inconsiderable, expense to the government, and will result in shortening the line of supply of that post some 30 miles, with a better road than the one now in use.

On the 17th of July, a detachment from Fort Coeur d'Alene, under a commissioned officer, was detailed as directed by the General of the Army, and ordered to continue the work commenced last year in repairing the Mullan wagon road between Forts Coeur d'Alene, Idaho, and Missoula, Montana.

In winter months it is not unusual to learn of 15 feet of snow on the road, and the melting of this body of snow in the spring months severe

damages the Mullan road, which, without important changes in location at several points, and a heavy expenditure for labor, can hardly be maintained as a passable highway between the Territories it connects.

In closing this report I feel justified in stating that the changed condition in the attitude of those Indian tribes in this department that were once hostile, but are now quiet and peaceably disposed, the rapid settlement, during the past five years, of that portion of the department drained by the Upper Columbia and its tributaries, and the gratifying progress of the Northern Pacific Railroad and other important railroad lines, indicate that the proper time has arrived for making proportionate changes in the location of our scattered little posts, and in the interest of economy and discipline I recommend that the less important military stations in this department be abandoned, and that the troops be concentrated at fewer points near rail and water transportation, where they can be more cheaply supplied, more readily instructed, and more speedily moved to threatened points when necessary. I believe this can be safely done with infinite advantage to the military service, and an insured reduction of yearly cost to the Treasury.

With few other exceptions, not considered worthy of mention, the command has been fully occupied with the ordinary routine duties incident to its frontier station. I turn it over to my successor, proud of its instruction, discipline, and morale, certain it will be found fully equal to any emergency it may be called upon to meet in the future.

It remains to thank my staff officers, departmental and personal, for able, zealous, and faithful service in their respective branches of the service. It gives me genuine pleasure to speak of all in terms of the highest praise.

The personal and department staff as at present constituted are as follows:

Personal staff.—Second Lieut. J. T. R. Landis, First Cavalry, aid-de-camp and acting chief signal officer; Second Lieut. John S. Mallory, Second Infantry, aid-de-camp and acting judge-advocate.

Department staff.—Maj. O. D. Greene, assistant adjutant-general; Maj. George B. Dandy, chief quartermaster; Capt. Samuel T. Cushing, chief commissary of subsistence; Maj. John Moore, medical director; Maj. James P. Canby, Pay Department, chief paymaster; First Lieut. Thomas W. Symons, Engineer Corps, chief engineer officer; Capt. John A. Kress, Ordnance Department, chief ordnance officer, in charge of office of the acting assistant inspector-general.

The changes in the department staff have been Lieut. Col. C. G. Sawtelle, Quartermaster Department, chief quartermaster, relieved April 12, Special Orders 67, A. G. O.; Maj. Joseph H. Eaton, Pay Department, chief paymaster, retired; Maj. Edwin C. Mason, Twenty-first Infantry, acting assistant inspector-general, relieved June 25, G. O. 15, Department Columbia.

Very respectfully, your obedient servant,

FRANK WHEATON,
Breret Brigadier-General.

The ADJUTANT-GENERAL OF THE ARMY,
Washington, D. C.

5 A, 2.—ANNUAL REPORT OF GENERAL MILES.**HEADQUARTERS DEPARTMENT OF THE COLUMBIA**
Vancouver Barracks, W. T., September 29,

SIR: In accordance with your communication of the 7th inst. I have the honor to submit the following report:

The important events and movements of troops in this department during the year preceding the time of my assuming command have been mentioned in reports of my predecessors already forwarded.

On the 2d of August, ultimo, in accordance with the orders of the President, I assumed command of the geographical Department of the Columbia. Since that time but few changes have been made. Two companies, E and F, Second Infantry, have been ordered from Camp Spokane, I. T., to Fort Coeur d'Alène, I. T.; Company H, Twenty first Infantry, from Fort Stevens, Oregon, to Vancouver Barracks, W. T.; Company M, First Cavalry, from Fort Walla Walla, W. T., to Department of Arizona. The present stations of troops are as follows:

FIRST CAVALRY.

Regimental headquarters, Troops A, B, E, and K, at Fort Walla, W. T.

Troop D at Fort Lapwai, I. T.

Troop F at Boise Barracks, I. T.

Troop H at Fort Colville, W. T.

Troop L at Fort Klamath, Oregon.

FOURTH ARTILLERY.

Batteries F and K at Fort Canby, W. T., with detachment garrisoned at Fort Stevens, Oregon.

SECOND INFANTRY.

Regimental headquarters, Companies A, B, G, and I, at Fort Coeur d'Alène, I. T.

Companies D, E, F, and K at Camp Spokane, W. T.

Companies C and H at Fort Colville, W. T.

TWENTY-FIRST INFANTRY.

Regimental headquarters, Companies E, F, G, H, and K, at Vancouver Barracks, W. T.

Company A at Boise Barracks, I. T.

Company C at Fort Klamath, Oregon.

Company I at Fort Lapwai, I. T.

Companies B and D at Fort Townsend, W. T.

As far as practicable, I have inspected the posts in this department and from personal observation am enabled to report the troops well instructed, well disciplined, and in fair condition.

I find, however, that this military force has been inadequately supplied, as seen in the condition of barracks, quarters, and transportation.

The troops at several of the posts are not suitably or comfortably sheltered. This condition of affairs seriously affects both the morale and efficiency of the command.

I will forward complete estimates of what is required, and trust that a due proportion of the necessary funds and material appropriated may be furnished this department.

In addition to the usual military duties, the troops have been engaged, and are now employed, in constructing military roads from Fort Colville to Spokane Falls, W. T.; from Fort Colville to Camp Spokane, W. T., and from Fort Coeur d'Alène, I. T., east toward Fort Missoula, M. T. These routes (some 230 miles in extent), when completed, will not only greatly facilitate the movement of troops and supplies, but will be of great value to the public.

The troops are also engaged in establishing military telegraph lines from Spokane Falls, on the Northern Pacific Railroad, to Camp Spokane, W. T.; from Ashland to Fort Klamath, Oregon, and from Port Townsend to Cape Flattery, W. T., adding some 240 miles to the lines of communication. When completed all the military posts in this department, with one exception, will be within telegraphic communication. At the same time the lines are being used for private and commercial purposes, thereby benefiting the citizens of the country.

The troops, at available points, occupy a wide extent of country, the greater portion of which is inhabited by defenseless settlers and numerous tribes of Indians.

The different Indian tribes in this department are, in the main, in a peaceable condition; most of the semi-civilized are making some progress toward self-support; yet there are vast tracts of country still occupied by bands of nomadic Indians, and between the latter and the remote settlers conflicts of race may be expected. The evils arising from injudicious and illy-defined treaties made with these Indian tribes are becoming apparent, and the constant clashing of interests between the Indians and the miners, ranchmen, and farmers, is almost inevitable, and quite likely to result in open hostilities.

The germs of future Indian disturbances are already noticeable in some localities.

Measures are being taken which, when completed, will better facilitate communication with and concentration of the available force in this department, and at the same time increase the efficiency of the troops and lessen the cost of supplies, the chief aim being to make the limited force (of 1,570 soldiers) of the least expense to the general government, and at the same time give the greatest protection to a people occupying territory (not including Alaska) of 250,000 square miles in extent. When it is remembered that our troops have contended in the past, and doubtless in the future will have to meet, an enemy of superior numbers where the natural obstacles are dense forests, trackless mountains, and almost impassable rivers, the difficulties to be encountered will be easily understood and appreciated.

In this connection I desire to invite especial attention to the weak and defective condition of the companies and regiments of this command, an evil which prevails through the entire service.

It must be apparent to every one familiar with the subject, that our little Army is defective in organization, and, consequently, greatly overworked.

This nation of 50,000,000 of people calls upon its Army for more than double the labor required of any other troops in the world, and the testimony of those who have had the best means of knowing, from the humble frontier settler to the late Chief Magistrate, James A. Garfield, and in the words of the latter, is that the Army has been crippled and reduced

"below the limit of efficiency and safety," and the people "expect Congress and the Executive to make the Army worthy of a great nation."

By the present system we have a sufficient number of officers and non commissioned officers, but there is a great necessity for an increase in the number of soldiers in the different companies.

The "skeleton theory" has been found unwise, most expensive, and least effective.

Our Army is required to be efficient in every kind of military duty, including skilled marksmanship. It must guard our coast defenses and boundary lines, public arsenals, stores, and depots; it must protect the lives and property of citizens, scattered over vast Territories; and in cases of necessity those living in the populous States.

At the same time the troops are required to perform almost every kind of laborious work, constructing military posts, building roads and telegraph lines, also performing mechanical, clerical, and difficult manual labor.

This has a demoralizing influence upon the spirit of the troops, and causes desertion and other evils of the service.

In cases of emergency the skeleton companies are suddenly gathered up from distant points at great expense, and thrown into engagements ill prepared for such serious business, and expected to perform the work of well organized and strong commands.

With our present facilities for the government and accommodation of troops, companies of 100 men can be easily maintained, and in every sense better fitted for the service required of them. There would probably be ten per cent. added to the yearly appropriation required for pay, food, and clothing of the men; but the efficiency of the Army would, in my judgment, be increased more than one hundred per cent.

I am satisfied that, in my own department, the yearly expenditures now made necessary by the weak condition of the companies and regiments could be greatly lessened.

If the companies were made of proper strength, not only would there be a large saving of the extra military expenses, but there would be greater benefit and security given to the people whose lives and property depend to a greater or less degree upon the protection guaranteed by the physical force of the general government.

I would therefore recommend that the authorized maximum number of enlisted men in the different companies be 100 per company where they are so stationed and employed that the public interest would be benefited thereby.

I would also call attention to the fact of the number of officers who are permanently absent from their respective commands through the fault of theirs, men who have become infirm through long years of hard service, or crippled or permanently disabled in the various wars in which our army has been engaged; also to the number of officers who have grown gray in the service and yet are occupying the subordinate grade of captains, first and second lieutenants. These facts have a very discouraging influence upon a zealous and faithful body of public servants.

In every branch of business or profession in life advancement or progress is absolutely essential, and the rule is no less applicable to the military service, and some system that will either promote retirement by commutation of retired pay, limiting the retired list to such number as would be suitable for our kind of service, or universal retirement at a given age, would undoubtedly improve the efficiency of the Army, and it is believed to be very generally desired by the officers of our service.

I inclose the reports of the department staff officers, and invite attention to them for matters of detail in the different branches of the service.

I am, sir, very respectfully, your obedient servant,

NELSON A. MILES,

Brigadier-General, U. S. A., Commanding Department.

The ASSISTANT ADJUTANT-GENERAL,

Military Division of the Pacific, Presidio of San Francisco, Cal.

5 B.—REPORT OF BVT. MAJ.-GEN. O. B. WILLCOX.

HEADQUARTERS DEPARTMENT OF ARIZONA,

IN THE FIELD,

Tucson, Ariz., October 12, 1881.

SIR: In accordance with your telegram of the 10th instant and letter of 12th ultimo, I respectfully transmit the following as supplementary to my annual report:

On 6th of August last, Colonel Carr, commanding at Apache, telegraphed these headquarters that the chief and medicine man of a band of Indians living on Cibicu Creek, Nocky-del-klin-ne by name, had been for two months holding dances with the object of raising from the dead Indians who had been killed; that it was now reported to him (Carr) by interpreter that medicine man was telling the Indians that the dead say they would not return because of the presence of the white people; that when the white people left, the dead would return, and the whites would be out of the country when the corn was ripe. Colonel Carr says in that dispatch, "I do not know whether this is of any consequence. I feel it my duty to report it to the department commander." On August 11, Tiffany, agent San Carlos, says, "A number of White Mountain and San Carlos Indians congregated near Apache, and Tautos are also affected. Some medicine man of influence is moving on these Indians for, I think, evil purposes." On the same date, immediately on receipt of Tiffany's dispatch, I telegraphed Colonel Carr, commanding Fort Apache, to hold his command in readiness to take the field, as Hatch reports approach of hostiles from New Mexico, and I added, "The department commander hopes that by your good management you will secure the best feeling among the White Mountain Apaches."

I telegraphed this information to division headquarters on the 12th of August, informing you also that Tiffany wanted additional arms, and on the 13th informed you of disposition of troops ordered by me to re-enforce Fort Apache and to guard against Indian movements from New Mexico and on reservation.

Carr was telegraphed from Whipple Barracks, August 7, as follows:

The commanding general directs that you arrest the chief and medicine man Nocky-del-klin-ne, if you deem it necessary to prevent trouble, after consultation with the agent at San Carlos.

BENJAMIN,

Assistant Adjutant-General.

On August 13, Carr was telegraphed a dispatch of which the following is the only part bearing on the question, viz:

The two companies of cavalry at Thomas have been ordered to report without delay to you at Apache for temporary duty. The commanding general desires that you arrest the Indian doctor whom you report as stirring up hostilities, as soon as practicable.

BENJAMIN,

Assistant Adjutant-General.

Carr, in his report, says Tiffany requested him to arrest or kill medicine man.

On same day, August 13, I received the following :

FORT APACHE, August 13.

It is the general impression here that the men of the Indian scouts company go with their friends if they break out. Please give me authority to discharge them or such of them as I may believe unreliable, and enlist reliable ones in their place.

CARR, Commanding.

To which the following was sent in reply on August 14:

COMMANDING OFFICER APACHE :

You are authorized to make such changes as may be necessary, but will exercise wise discretion, and not suffer the disaffected scouts to join with contents.

BENJAMIN,

Assistant Adjutant General.

In what manner this authority and these instructions were carried out nothing was officially known, except that the scouts had been disarmed up to the time of the Cibicu massacre, Carr's report of which was telegraphed you from Phoenix. Carr was telegraphed on August 13 to report the situation fully, to which he replied on 14th, "Nothing to report." Nothing more of importance was heard from Colonel Carr (except his report of an interview on 17th with Pedro, Santo, and other Indians, which showed that the Indians were alarmed about report that a big gun and more troops were coming to Fort Apache; report has been forwarded to division headquarters) until the 29th, received 31st August. Meantime the troops that had been ordered forwarded by me from different points below and west of Camp Thomas were partly halted and partly turned back on reports received from Agent Tiffany by Captain Chaffee and Major Biddle, and communicated to me that no further trouble was to be apprehended. In this condition of affairs, on the 29th August Carr telegraphed :

ADJUTANT GENERAL, Whipple Barracks.

I sent word to Nocky-del kin us that I wanted to see him. He does not seem likely to come, and I am searching for his place in Cibicu, to try to catch him.

CARR, Commanding.

This proved to be the march to Cibicu Creek undertaken by Colonel Carr without special orders from me other than to arrest the medicine man if he deemed it necessary to prevent trouble, and as soon as practicable he being at same time notified that re-enforcements were ordered from Camp Thomas. The move was made without waiting for re-enforcements.

August 15, Carr, commanding at Apache, was telegraphed by me orders as follows: "If your company of scouts cannot be relied on, send them out to Stevens's Rancho, Eagle Creek, and thence down to Gila to Grant and Huachuca. Bailey's company, if needed, could replace them. More than the usual cavalry force might accompany them part of the way, if you deem it best. Notify Biddle and these headquarters of your action." But no notice was ever received of any such action. The only action I know of was by telegram from Colonel Carr to me to effect that he had disarmed the scouts, and the next I hear of them is that they had turned their arms against him at Cibicu on occasion of the arrest of the medicine man.

The object of the march to Cibicu was to make said arrest and thereby put a stop to the medicine man's apparent efforts to stir up hostilities against the whites, which arrest was effected, but undoubtedly led to contrary results from those designed.

The immediate cause of the attack on Colonel Carr was the arrest

the medicine man. The remote causes are unknown, as no grievance had ever yet been complained of by the White Mountain Indians; but it is possible that this attack and the subsequent one on Fort Apache were made under the inspiration of the medicine man's prophesying that the white men should be cleared out as soon as the corn was ripe, which time had nearly come. For the way in which the attack was made and resisted, including the subsequent attack on the fort, I refer you to Colonel Carr's report of September 6, which I desire to be attached to this report.

Notwithstanding high water in the rivers, the very limited means of transportation, and embarrassing and conflicting reports from San Carlos, the troops were moved to Cibicu country in such a manner and time as to drive the hostiles from their strongholds into the folds of the reservation without a fight, and the White Mountain Indians have not struck another blow. Many of the worst have surrendered. Those of the recreant scouts in our hands will be tried by court-martial; the rest will be disposed of according to such instructions as may be received.

The California re-enforcements have been of great service, and were sent down promptly as called for, and well equipped for the field. Part of them now are in pursuit of the Chiricahuas on the border. The outbreak of these Indians on the night of September 30 has been duly reported, and the causes of their sudden change are unknown. It is supposed to be the fear of being disarmed. If this is true, the outbreak was likely to come at any moment, and could not have come at a better time. This because we had adequate force at hand, and it has been used to such advantage that the smallest possible damage has been suffered. This tribe is now in full flight and utterly defeated.

Major Sanford's report of the fight at Cedar Springs, and my indorsement thereon, has been forwarded, and I wish it to be included with this report. Captain Bernard's report of subsequent operations will, when received through Colonel Mackenzie, now directing in the field, be duly forwarded.

Too much stress cannot be laid upon the necessity of having cavalry horses and pack-trains always on hand sufficient for emergencies, and that we should no longer be stripped to the bare necessities for troops in garrisons.

Very respectfully, your obedient servant,

O. B. WILLCOX,

Breret Major-General, Commanding Department.

The ASSISTANT ADJUTANT-GENERAL,

Presidio, Cal.

6.—REPORT OF MAJ. GEN. O. O. HOWARD.

HEADQUARTERS DEPARTMENT OF WEST POINT,
UNITED STATES MILITARY ACADEMY,
West Point, N. Y., October 12, 1881.

SIR: I have the honor to submit my first annual report of the Military Academy:

LAW AND ORDERS; HOW COMPLIED WITH.

General Orders No. 84, dated December 18, 1880, from your headquarters, paragraph I, read as follows: "Brig. Gen. O. O. Howard is assigned

to the command of the Department of West Point, and to do superintendent of the United States Military Academy, accord his brevet of major general, and will relieve Maj. Gen. John M. field."

In compliance with the above instructions, I turned over the command of the Department of the Columbia to the next officer in rank, and proceeded to West Point, arriving the 20th of January, 1881. The day I assumed formal command of this department, and entered upon the duties of superintendent of the academy.

Having been stationed here before, as an instructor, I was comparatively well acquainted with the systems of instruction, management, and discipline which have long prevailed at this post and institution. The law of Congress (see Revised Statutes, section 1314) declares that the superintendent, as well as all other officers of the academy, may be detailed from *any arm* of the service having scarcely any modifications in the rules and practices differing from which prevailed before.

In General Orders No. 15, series of 1877, I find the following :

PAR. I. The Military Academy and the post of West Point shall constitute a separate military department, the commander of which shall report directly to the General-in-Chief of the Army. The General-in-Chief, under the War Department, have supervision and charge of the academy. He will watch over its administration and discipline and the instruction of the corps of cadets, and will make reports to the Secretary of War.

The effect of the law was, first, to open the largest possible selection to the President, instead of confining it to any staff of the Army; and, by the orders last quoted, the effect has been virtually to advance a post to the importance of a military department. In this way the field of selection of superintendent embraces the general staff as well as those of lower grade. There has been necessarily some increase of reports to be made, and a slight increase of clerical force. Again, a captain and regular quartermaster has replaced the former tail-tailed lieutenant. Every change made, in fact, has rendered the administration here more consonant with the usual administration of a department and of army posts.

Three good objects, under present arrangement, appear to be accomplished with very little, if any, additional cost: First, the authority of the commanding officer to order general courts for the trial of all enlisted men as well as cadets; second, to enable all concerned, officers and cadets, to be constantly familiar with practical Army methods of administration and government; and, third, to keep up the interest of the General-in-Chief and of all other officers of the Army in the management and welfare of the academy.

ACTING ASSISTANT ADJUTANT GENERAL'S OFFICE.

Though the limits of the department and the post are identical, the business is now so arranged as to prevent a duplication of records and accounts. For the sake of economy I have, as did my predecessor, dispensed with the services of an adjutant general, having my senior aide-de-camp do the duty. This officer supervises the correspondence of all official kind, which now comes to us from the outside, and in the last decade has, for some evident reasons, grown to very large proportions. The present average will give about 2,000 communications a year. He also makes the post returns, receives the reports from the police, detachments, engineer company, and general guards, and issues

as may be required which pertain to officers, soldiers, citizens in the department, with reference to furloughs, leaves of absence, of transit, visitors, excursionists who come and go, and such like things.

ADJUTANT'S OFFICE.

The adjutant of the academy is, ex officio, the secretary of the academy board, and is also recruiting officer, commanding officer of the band and field music and of the general service detachment. In addition he is charged with carrying out in detail all the direct correspondence with the heads of the various departments of instruction and with reports of cadets; he prepares the academic reports that require submission to Washington, and sees that the punishment and demerit rolls are kept with accuracy, submitting them daily to the superintendent. He must also attend to the proper working of the academy recruiting office, the preparation of the staff records, the keeping up of official correspondence with parents or guardians of cadets, and also reply to the daily requests for information made by members of Congress, schools, and colleges, and would-be candidates for admission.

I have been thus particular with reference to these two offices so as to make a brief exhibit of the labor performed.

I have been asked by members of the board of visitors if there was any advantage in a department. My answer was that I thought the departmental functions were of advantage to the academy. I still think the same duties can be done by a post organization, or even by a reorganized academy organization. In fact, the academy, like the staff of the army, could be reorganized. Yet, in the end, I do not think it can be bettered.

DISCIPLINE AND MANAGEMENT.

The academic board consists of the nine professors, the commandant, the chiefs, the chief instructors of ordnance and gunnery and practical military engineering, and the superintendent, who is, ex officio, president of the board. This makes up a membership of thirteen. Every interest of the academy is carefully weighed by this body of able men. In my opinion, it is the most powerful agent at work here. It is my earnest desire while superintendent to work in harmony with the board as at present constituted. This will give unity and strength to all official action.

Since my arrival a few changes have been made in the regulations. I will give a sample:

Paragraph 30, Regulations for the United States Military Academy of 1877, is repealed and the following substituted therefor:

Art. 30. This course will comprise topography and plotting of surveys with lead-pen and ink, and colors; problems in descriptive geometry, shades and shadow, and perspective; practical surveying in the field; free-hand drawing and landscape in black and white; constructive and architectural drawing in ink and colors. The head of the department will accompany instruction, covering the subjects: General rules for rectilinear and map drawing, scales, lettering, &c.; topographical drawing, different systems and methods of terrene drawing, &c.; methods of projection, meridians and parallels; plotting from field-work; field-sketching; general principles of triangulation, plotting, and filling in; free-hand drawing, light and shade, and material; theory of color; quality and character of pigments; methods of coloring and tinting in water-color; the orders of architecture; fundamental architectural forms and general proportions; drawing of plans."

Paragraph 72, Regulations for the United States Military Academy of 1877, is repealed and the following substituted therefor:

Art. 72. If any cadet shall have a total number of demerits thus recorded exceed-

ing one hundred and twenty-five (125) for the time between June first and December thirty-first, both dates inclusive, or exceeding ninety (90) for the time between January first and May thirty-first, both dates inclusive (no credits being allowed other than those belonging to the time considered), he shall be reported to the academic board by the superintendent deficient in discipline; and the board shall consider and act upon such a deficiency as in cases of deficiency in studies." (G. O. No. 22, A. G. O., February 19, 1881.)

Paragraph 75, Regulations for the United States Military Academy of 1877, is revoked and the following substituted therefor:

"PAR. 75. Every cadet of the first class who shall have been found proficient in all the studies and exercises of the entire academic course prescribed, including discipline, and whose character as shown by his conduct as a cadet shall be deemed satisfactory, shall receive a diploma signed by the members of the academic board, and shall thereupon become a graduate of the Military Academy.

"The names of the graduates shall be presented to the War Department, with the recommendation of the academic board for commission in the several corps of the Army, according to the duties each may be judged competent to perform.

"If the academic board doubt the physical ability of a graduate for military service, his case shall be referred to a board composed of the superintendent, the commandant of cadets, and the medical officers provided in paragraph 19, as prescribed in the last paragraph of this article"—(G. O. No. 22, A. G. O., February 19, 1881.)

The recommendation of the academic board that paragraph 129, Regulations of the United States Military Academy of 1877, be expunged, and that the following be substituted for it: "The use of tobacco in any form by cadets is prohibited," has been approved by the Secretary of War.—(G. O. No. 6, June 11, 1881, Headquarters United States Military Academy.)

These changes were recommended by the academic board after careful consideration, and I believe will prove decidedly beneficial to the academy.

I have myself made some modifications of existing orders, such as abolishing the cadet "all-night guard" in the barracks, relieving academic officers from company duty with the cadets, the confining of sergeancies to the second class and corporalcies to the third class, the cutting down of Sunday permits recently given cadets to go beyond the limits, and a few others of relatively small importance. In each instance my purpose has been not to make changes, but to recall some already made which our experience has proved beyond question to be injurious to the cadets. My earnest judgment is in favor of a thorough discipline, but not of a martinetism which overloads the young men with espionage and punishments too numerous and too heavy to be borne. Of course, the cheerful, hearty performance of duty in the main effected by doing right because it is right is the best. The tendency here, with a view of keeping abreast of other institutions of learning, is naturally in the course of time to multiply the text-books and lengthen the lessons. The tendency in discipline is ever to multiply the reports of delinquency and to enforce the reporting by an almost inflexible system of action. The relief to these things, so far as the studies are concerned, is found in the conservative wisdom of the academic board, and in the discipline the burdens are relieved by the watchful kindness of the tactical and other executive officers. Thus believing, I have endeavored to diminish the number of reports, all possible, consistent with good order and good training, and to use all the influence in my power in favor of a kindly and paternal execution of our rules and regulations. The results are good. I have thus far met only good will. There was no hazing during the last summer encampment. Cadets generally appear contented and are very industrious. In order to facilitate the official intercourse between the cadets and the superintendent without interfering with the essential order of business, one hour every day, except Sundays, is now given to the cadet, if he so desires, to visit the superintendent. Further, he can easily obtain permission from the officer in charge to do so at any other time if necessity appears to him to warrant it.

DETAILS OF INSTRUCTORS.

Every year a strong pressure brought to bear upon the superintendent to induce him to lengthen the term of service of the officers at the academy as assistant professors and instructors. The academy has usually adhered to, especially as pertaining to the line officers, three years. In my judgment, it is of great advantage to the young officers to have a term of duty at the academy. Besides the necessary review of past studies, it has become the custom for each officer carefully to write an exhaustive paper upon some important military subject, and to read it before an organized society, where full and free criticism is invited. Further, the officers have the advantage of the large amount of spare time by advantageous reading and research. It is highly desirable to extend these advantages to as many officers of the academy as possible consistent with the best interests of the academy and the service. It might be well to extend the time to five years in lieu of limiting it to four. I recommend this extension.

It is also true that there are at present a sufficient number of permanent instructors. Permanency promotes the tendency to increase the curriculum of instruction. I would not, then, make permanent the professor of law, the instructors in practical military engineering, in infantry and gunnery, and in artillery. Five years will surely be a sufficient term to detain these able officers from their professional duties in the field at large. From present knowledge and experience I am of opinion that the same rule as to length of term should apply to the superintendent and the superintendent. A change of administration has heretofore proved, to any extent, detrimental. The institution has been improved by bringing in a variety of talent, and as so long as things are fixed and rigid in any military system, an occasional change in the manner of executing laws and orders is, I think, desirable. In this, as in all other matters, the academy is established and maintained for the interest of the Army, and not the Army for the Academy. Therefore, worthy and capable officers in all the branches should, and ought to continue to have the opportunity of detail, as the law of Congress contemplates.

BUILDINGS.

The enlargement of the cadet barracks is progressing as rapidly as the appropriations will permit. As soon as completed there will be sufficient room and therefore less crowding than usually occurs on the academy grounds for the new cadets each year. Meanwhile, I have been able to increase the number of officers at the academy, have added one new set of barracks, and have had put in habitable condition that of the professor's quarters which was injured and partially destroyed by fire. I can now accommodate nearly all the academic officers from the cadet barracks and have them comfortably quartered. Our needs in this direction will be further subserved as soon as the new hospital shall have been completed and rendered fit for occupancy. The old hospital, with a few minor repairs, can be made to extend our quarters' accommodation. The dentist also will have a new room, with adequate light, in the old hospital. These changes will operate to have the cadet barracks properly equipped, as they should be, only by the cadets and instructors in

In several reports of the board of visitors and of the superintendent, it is recommended that large panes be put in the place of the small lights in the windows of the cadet barracks. For some reason

the appropriation asked for this object has hitherto failed. Certain the light at present is insufficient. I think the change suggested, the trimming of the trees, now large and during part of the year thick with foliage, will be all that is required to give sufficient light to the rooms. There are several changes that will soon be required in the heating and ventilating of the cadet barracks and the academic building. I believe that the academic building may be so changed, possibly by raising it one story, to fit it better to meet present necessities than it now does. Either an enlargement of the gymnasium-room, now in the basement of that building, should be made or a new building adapted for this purpose constructed. In several reports, since the cutting off the railway of the cadets' bathing place, the necessity of supplying a swimming bath has been urged. I again call attention to this matter.

I have had a "system of gymnastic exercises" prepared, and a formal instructions for the swimming baths. The former are already in use, and the latter will be as soon as the swimming baths shall be constructed. I may add here that these exercises and those of the fence and sword exercise, which did not prove this year to be as creditable as other performances of the cadets, the commandant has now placed under the more direct and immediate control of one of his skillful tactical officers.

It may appear to you that the Academy continually calls for new constructions. The reasons are, first, that it was built and arranged long since, and before modern improvements in the way of heating, lighting, water supply, &c., were in vogue, so that many of our buildings do not compare favorably with corresponding buildings of many other leading institutions of learning. Again, the numbers to be accommodated, both cadets and officers, have greatly increased. It would, indeed, be wise to have a board of skillful officers, appointed by the Secretary of War, visit the Academy, examine all the structures, the water supply, and the sewerage, and make such recommendations and detailed estimates as should be found necessary to give system, order, and completeness to the whole. Should this be done, and the essential appropriation be granted, the yearly requisitions would thereafter be much diminished, and the board of visitors and other friends of the institution feel better satisfied with the building accommodations. My full estimates, which have been forwarded, cover other repairs and constructions besides the above. The necessity for them is apparent on their face, and I hope the appropriations for them may be obtained.

FINANCES.

As you will probably be obliged to answer some objections which have lately been raised against the financial system in vogue at the Academy, I have called upon the treasurer to make a full and explicit statement of the funds in use, how they accrue, and how they are expended. It should be remembered that the intent of the law and regulations is that the cadet's monthly allowance, or, as officially denominated his pay, should be made to cover his actual expenses. Hence the charge against him cannot be, for example, in regard to his subsistence, merely the cost in the market of provisions, but must cover the cooking and serving. The cost of a coat cannot be simply the cost of the cloth, but must include each cadet's portion of the cutting, the making, the repairing, and the account keeping. This could, of course, all be avoided by a system of contract, but the changing forms of the young men and the necessity for special fitting under the immediate charge of the author-

of the Academy is plain to every thoughtful man interested in the institution. It is surely impracticable to purchase for the cadets ready-made clothing by the wholesale. Instead of being neatly dressed as now, in well-fitting uniforms, we should soon see a battalion of shabby appearance. Again, it would be next to impossible to keep up the excellent character of the material now furnished, and difficult at the best to maintain the present economy in prices.

It has been suggested in recent reports "that here there should be appropriation to purchase a stock of provisions for which the commissary should account to the Treasury Department, as is done in the army," with the added assertion that "this would result in no loss to the Government, but in a more perfect responsibility in the disbursing officer." I hope that this will not be done. For it would establish an objectionable ration system, necessitating the purchase of provisions so long in advance that certain supplies would deteriorate, and a loss necessarily fall upon the government, and it would eventuate in a rigidly monotonous system of daily subsistence not adapted to the needs of growing young men. Again, now there is much less wastage and loss under the present system of buying and issuing supplies when needed than there would be under any other system.

The only possible objection to requiring the commissary of cadets to report to the Treasury Department directly for supplies purchased and issued by him to cadets is that it will require additional clerical assistance and add just so much to the deprecated cost. The treasurer is subjected now, by the inspector of accounts and by the board of audit, to repeated and constant supervision, as the treasurer's report shows. The reasons for the existence of several separate funds, as "the laundry," "boat," "printing," &c., are that the needs have, from time to time, suggested to the officers in charge these methods of supplying them.

It would be generous on the part of the government to assume these charges and make direct appropriations therefor, but it would at once change the manner of dealing with each cadet's accounts and really require an increase of compensation. For such changes careful legislation will of course be requisite.

I introduce and make part of my report the following statement of the treasurer of the Academy, Capt. William F. Spurgin, Twenty-first Infantry, he is also quartermaster and commissary of cadets:

In obedience to instructions, I have the honor to submit information relative to the following named funds, for which I am responsible, as exhibited by the books of this office, for the month 28, 1881, the date of last settlement, viz:

- 1 Cadet company account
- 2 Cadet laundry.
- 3 Cadet quartermaster's department.

4 Corps of Cadets.

5 Interest.

6 Military Academy post.

7 Printing.

8 Boat.

9 Damages, library.

10 Gas.

11 Damages, quartermaster's department.

12 Miscellaneous.

13 Due to society.

14 Boat dues.

15 Cadet subsistence department.

I endeavor to explain in order, how these funds accrue, and how they are expended.

16—CADET EQUIPMENT.

Four dollars of the monthly pay of each cadet is set aside at each bi-monthly settlement of his accounts that he may have upon graduation a sum sufficient to provide

himself with uniform and equipments. The accrued total of same so set aside constitutes the "cadet equipment fund." This fund is largest at the final settlement of graduating class in June of each year.

Amount of fund, \$16,672.

2. —CADET LAUNDRY.

This fund accrues from charges made against each cadet for laundry work performed for him at a fixed rate per article as follows, viz: White pants, white jackets, gray pants, gray jackets, blankets, and comfortables or quilts, three (3) cents per piece from July 1 to September 30, and five (5) cents per piece from October 1 to June 30. White shirts, colored shirts, undershirts, night-shirts, cuffs (pairs), collars, socks, hosiery, and sheets, two (2) cents per piece, from July 1 to September 30, and three cents per piece from October 1 to June 30. Gloves (pairs), pillow cases, towels, clothes bags, one (1) cent per piece from July 1 to September 30, and two (2) cents per piece from October 1 to June 30. The fund is expended in paying the salary of male employees, viz: Foreman, engineer, fireman, and driver of laundry wagon, and paying the wages of the laundry women and necessary incidental expenses. During the past summer twenty-nine (29) women were employed constantly. During winter fifteen (15) women will be employed. During the summer (when only white pants and jackets are worn, the expenses of the laundry greatly exceed the receipts. During the remainder of the year the receipts exceed the expenses. Prior to the establishment of the laundry, in 1865, the laundry work for cadets was performed by women at their homes, and at a cost to the cadets much greater than charged. The laundry was built from funds borrowed from the Military Academy fund. The debt has been repaid and the laundry fund increases slowly and steadily year after year. This increase is most desirable, that means may be at hand to accomplish suddenly required repairs, and to defray the expense of renewing constantly wearing out machinery. Extensive repairs together with certain new machinery now needed. To supply such will require a heavy expenditure of the accumulated laundry fund. The sum required can only be stated after specific estimates have been prepared. These estimates will be submitted at as early a date as practicable.

Amount of fund, \$5,421 86

3. —CADET QUARTERMASTER'S DEPARTMENT.

All articles, such as clothing, books, stationery, bedding, and furniture are supplied the cadets from the cadet quartermaster's store-house. I am unable to ascertain satisfactorily when the store was first established. Prior to the passage of the act of Congress approved August 7, 1876, the cadets were supplied articles at a varying percentage above cost, and it was from such sales that the cadet quartermaster's department fund, which consists of stores and money, accumulated. Since the passage of the above cited law, I am informed that the cadets have been supplied with goods as near the actual cost as it may be possible to determine the same, taking into consideration the wholesale cost of the goods, freights, and the wages of necessary authorized employees, viz: one (1) clerk, at a salary of \$75 per month; one (1) cloth-cutter, at \$120 per month; one (1) shoe-cutter, at \$87 per month, and one (1) fireman, at twenty-five (25) cents per hour. Additional clerical assistance in keeping books and accounts of the store costs the department twenty-five (25) dollars per month. The inventory of goods taken last month shows the invoiced money value of stock on hand to be \$22,224 27. As before stated, the stock on hand, together with the cash in the hands of the treasurer, \$4,707 95, represent the assets of the cadet quartermaster's department, other than buildings which have from time to time been acquired from the funds of the department. The department is in a healthy working condition with no more surplus fund on hand than is needed in supplying promptly the requirements of the corps, at lowest wholesale cash rates.

4. —CORPS OF CADETS.

The corps of cadets is paid every two months. Muster-rolls are accomplished for each company in the corps and are transmitted to the paymaster, who places the total due with the assistant treasurer of the United States, New York City, to the credit of the treasurer of the Military Academy. The account of each cadet is settled after each muster. If in debt, he is charged with the amount due, and this indebtedness is liquidated from future pay. If out of debt, he is credited with the amount due him. The sum total of amounts due cadets personally upon bi-monthly settlements constitutes the corps of cadets fund.

Amount of fund, \$3,185.05.

5.—INTEREST.

All moneys appertaining to the foregoing funds not required for immediate use are invested by authority as follows, viz :

Registered bonds, United States 4 per cent. consols of 1907, acts July 14, 1870, and January 20, 1871	\$10,000
Registered bonds of the United States funded loan of 1891, acts July 14, 1870, and January 10, 1871 (4½ per cents.)	15,000
Total	25,000

The interest derived from these bonds constitutes the interest fund. This fund may be expended under the authority of the Superintendent for any object which may benefit the corps of cadets.

Amount of fund, \$1,951.56.

6.—MILITARY ACADEMY POST.

This fund accrues from rents received for the hotel, the quarters occupied as a post-office, and the building used as a livery stable. This fund is expended in keeping the buildings above mentioned in repair, in purchasing sheet music for the band, in the repair of band instruments, in paying extra compensation of \$10 per month to the drum major, and for hire of carriages for the War Department officials when visiting the post officially.

Amount of fund, \$1,001.

7.—ENGINEERING.

This fund accrues from charges made against cadets for two books supplied them, viz, "Wheeler's Engineering" and "Art and Science of War." Under the operation of the law which authorized the supplying of these books to cadets, the sums collected for books already furnished and the sums which will hereafter be collected for books on hand unsold, will be turned into the United States Treasury.

Amount of fund, \$994.

8.—PRINTING.

This fund accrues from a monthly charge against each cadet of twelve cents. It is expended in defraying some of the expenses of the printing office and in payment for such printing as may be required and which may be beyond the capability of the academy printing office.

Amount of fund, \$732.71.

9.—DAMAGES, LIBRARY.

This fund accrues from a monthly charge of 2½ cents made against each cadet for the use of Webster's Unabridged Dictionary, and from assessed damages to the books belonging to the library whilst in the possession of cadets. The fund is expended in repairing damages to bindings of books and for other expenses connected with the library.

Amount of fund, \$200.73.

10.—GAS.

This fund accrues from a monthly charge of 35 cents against each cadet for gas consumed, and from sale of gas to officers and others at the post, and from sale of coke. The fund is expended in defraying the necessary maintenance, construction, and current expenses of the gas works, other than fuel, and for the construction of main, pipes, &c.

Amount of fund, \$59.58.

11.—DAMAGES, QUARTERMASTER'S DEPARTMENT.

This fund accrues from charges made against cadets for damages to windows, and to such furniture as may be supplied by the quartermaster's department, United States Military Academy. The fund is expended in repairing damages to windows, &c.

Amount of fund, \$54.15.

12.—MISCELLANEOUS.

This fund arises from fractional amounts on pro-rata charges against cadets, and is expended for postage stamps and postal cards for treasurer's office.

Amount of fund, \$12.17.

13. —DIALECTIC SOCIETY.

This fund accrues from initiation fees, fines, and assessments imposed by the upon its members. The fund is expended solely for the benefit of the society. Amount of fund, \$10.65.

The foregoing embrace all funds which have a credit balance with the treasury of the academy.

14. —BOAT.

In the year 1877 the sum of \$1,384.76, as it appears from the records, was expended for boats, which are used in instructing the first class in proper management of the same. The sum of \$8 per annum is charged against each member of the first class to liquidate this indebtedness.

This fund is indebted to the treasurer \$189.13

15. —CADET SUBSISTENCE.

All subsistence supplies consumed by the cadets are purchased at wholesale rates, bills payable at bi-monthly settlement. As supplies must be on hand when needed, it becomes necessary to make purchases in advance. Thus an account is opened for money advanced by the treasurer to the cadet subsistence department to pay for advance supplies. The cadet subsistence department is indebted to the treasurer to a greater or less extent according to advance supplies on hand. At the last settlement this indebtedness amounted to \$970.84.

Subsistence supplies are kept in store and are issued by the "cadet subsistence department" daily to the cadet mess, and are charged to the mess only when, at the monthly settlement the sum total of cost of daily issues, together with wages of cooks, attendants, gardeners, &c., divided by the number of cadets subsisted during the preceding two months, determines the cost of subsistence to each cadet for that period.

Paragraphs 332 and 333 Academic Regulations, 1877, are as follows, viz:

"PARAGRAPH 332.

"The commandant of cadets, the senior assistant instructor of tactics, the quartermaster of the Academy will compose a permanent board to audit the accounts of expenditures for subsistence of the cadets, and assess the monthly rates to be paid by each cadet. The board will be assembled by the commandant after each muster, and report to the superintendent as soon thereafter as practicable.

"PARAGRAPH 333.

"The board is charged with the special supervision of all the duties of the quartermaster, and will see that the strictest economy is practiced and observed throughout every department of his business, examining into the mode of procuring, issuing, preserving the subsistence stores, mess furniture, and other property, the whole military process and apparatus, the books of receipts and issues, and the accuracy of statement of property on hand at every muster day; the number of cooks, and other persons employed, and the necessity thereof; and shall report to the superintendent after each regular muster any irregularities in these particulars that may exist, and recommend any changes they may think calculated to promote the efficiency of the corps of cadets."

Under the provisions of paragraph 332, above quoted, the board of audit, upon equitable grounds, assesses an amount which shall be charged cadets for subsistence greater or less than the actual cost. When the corps is full the cost of subsistence per cadet is less than when one of the classes is absent on furlough, and it is wise to increase the assessment when the actual cost is not excessive, when the corps is present, that a fund may accrue which may bear a portion of the cost of subsistence when the corps is temporarily reduced and the expenses are relatively increased. The cadet mess has a credit with the cadet subsistence department, has accrued from increased assessments, amounting to \$1,121.41. This sum appears to the credit of the mess on the mess account-current, but does not appear on the statement of the treasurer. The only item which appears on the treasurer's statement is the indebtedness of the cadet subsistence department, which is the difference between the sum due cadets' mess by the cadet subsistence department and the sum which has been expended by the treasurer for advance supplies. This indebtedness is denominated cadet subsistence fund.

Amount due treasurer, \$970.84.

RECAPITULATION.

Cadet equipment.....	\$16,672 00
Cadet laundry	5,421 86
Cadet quartermaster's department	4,707 95
Corps of cadets	3,185 05
Interest	1,951 56
Military Academy post	1,001 00
Engineering	994 00
Printing	732 71
Damages, library	200 73
Gas	59 58
Damages, quartermaster's department	54 15
Miscellaneous	12 17
Dialectic society	10 65
Total	35,003 41

This sum embraces all moneys for which I was accountable September 28, 1881, the date of last settlement, and is accounted for as follows:

Invested in United States 4 per cents, consols of 1907	\$10,000 00
Invested in United States 4½ per cents, funded loan of 1891	15,000 00
Deposited with United States assistant treasurer, New York	6,252 22
Boat fund	389 13
Cadet subsistence department	970 81
Cash on hand	2,391 22
Total	35,003 41

The published report of the Board of Visitors to the Academy last June, as it appears in the public journals, contains the following in referring to the various funds appertaining to the Academy, viz:

The surplus balances of these various funds and property on June 1, 1881, amounted to little less than \$50,000, all of which is the result of the percentage system, and to secure justice to former cadets for the levying of this tax, the Board are of the opinion that the money should be devoted to some purpose in which former cadets may have an interest and their successors a benefit, and a memorial hall is suggested at West Point to commemorate the services of such cadets as may have distinguished themselves or died in public service.

The foregoing statement in regard to the "surplus balances" of the various funds is erroneous.

1st. The cadet equipment fund, which on June 1, 1881, amounted to \$25,568, and which was reduced \$9,776 on the final settlement of the last graduating class, because of amounts paid to the individual members thereof, and which fund at date of last settlement amounted to \$16,672, must not be considered a "surplus balance," because *it is the sum total of moneys retained from the monthly pay solely of those cadets now at the Academy*, and which is held in trust for them until they graduate, when they will receive personally the sum so retained, that they may have means sufficient to purchase an outfit, such as is required of every officer on first entering the service. Should a cadet sever his connection with the Academy prior to graduation, the portion of the "fund" contributed by him is then paid to him. No graduate of the Academy has ever contributed directly or indirectly a cent to the *present* equipment fund, and to appropriate any portion of this fund for any purpose other than that for which it is accumulated would be to perpetrate an act of injustice which is certainly farthest from the intention of the board.

2d. The corps of cadets' fund in the hands of the treasurer, and which amounted at date of last settlement of the accounts of the cadets to \$3,185, must not be considered a "surplus balance," because it is the sum

total of moneys *due* cadets personally on settlement of personal accounts and which is held in trust for them until required for expenditure for their personal needs. No cadet is allowed to have in his possession money or to handle any portion of his pay; hence, sums *due* him remain in the hands of the treasurer, as before stated, until such time as the expenditure thereof is needed for his authorized personal requirements.

These two funds, amounting together to \$19,857, must be subtracted from the sum total of all funds in the hands of the treasurer, \$35,003.41, before we can begin to speak of "surplus balances." After the subtraction and there remains in the hands of the treasurer a balance of \$15,146.41, which is made up of all other funds enumerated in the treasurer's accompanying statement.

The laundry fund of \$5,421.86 may be considered a "surplus balance" but this sum or a large portion thereof will sooner or later be expended for repairs of the building occupied as a laundry, and for new machines and equipments to the same. As long as there is no appropriation by Congress for the laundry, this fund cannot be expended except on account of the laundry without inflicting injury, and this fund should not be considered a "surplus balance." Deducting the laundry fund of \$5,421.86, from the sum total of funds other than personal before mentioned, viz, \$15,146.41, and there remains to be considered the sum \$9,724.55, which embraces all funds other than the "equipment," "cost of cadets," and "laundry" funds. Of this last amount the only fund which has accrued under the percentage system, is the cadet quartermaster's department fund of \$4,707.95. This may be considered properly a "surplus fund," but in the absence of Congressional appropriations for the purchasing of required supplies other than subsistence this amount is absolutely needed to enable the quartermaster of cadets to take advantage of the wholesale cash market, in order that supplies may be obtained when needed at advantageous prices. This fund increases and diminishes as the stock of supplies on hand in the cadet quartermaster's department diminishes or increases. This fund and the stock on hand must be considered together. To devote any portion of this to any purpose other than that of procuring needed supplies, in the absence of Congressional appropriations, would be clearly wrong and paralyzing in its effects. All other funds are indispensable in the absence of Congressional appropriations in continuing the existence of the objects to which they are devoted.

I have shown that there are no "surplus balances" in the hands of the treasurer in excess of \$15,146.41, and I trust I have shown with sufficient clearness that there are no "surplus balances" at all which are available for the object recommended by the Board of Visitors.

Since I have taken charge of this military department there has been a marked fidelity in the service and conduct of the professors, instructors and other officers on duty here. I commend them to the favorable consideration of the General-in-Chief and of the Secretary of War and append to the report a copy of the present roster.

The clerks, including those of the general service, are particularly efficient.

And certainly when discipline is so carefully maintained, the cases of punishment shows a good record for the enlisted men of several detachments on duty at or near the academy.

I do not feel that I have made an adequate exhibit of the work accomplished, and I have much in mind that should properly be reported on as with reference to the qualifications for admission, the expedience

September cadets, &c., but prefer a longer observation and experience before recommending any further changes.

I am, General, very respectfully, your obedient servant,

O. O. HOWARD,

Brig. and Bvt. Major General, U. S. A.,

Superintendent U. S. Military Academy, Commanding Department.

The ADJUTANT GENERAL, U. S. ARMY,

Washington, D. C.

Roller of officers and troops serving in the Department of West Point, commanded by Brigadier General O. O. Howard, Brevet Major General U. S. Army, October 1, 1881.

DEPARTMENT OF WEST POINT.

UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y.

Brig. Gen. O. O. HOWARD, brevet major general, United States army, commanding.

DEPARTMENT STAFF.

First Lieut. J. A. SLADEN, Fourteenth Infantry, aide-de-camp, acting assistant adjutant-general.

First Lieut. CHARLES E. S. WOOD, Twenty-first Infantry, aide-de-camp, acting judge-advocate.

Capt. CHARLES H. HOYT, assistant quartermaster, chief and post quartermaster, and disbursing officer military academy.

Second Lieut. GUY HOWARD, Twelfth Infantry, aide-de-camp, detached (at Artillery School Fort Monroe, Va.)

MILITARY STAFF OF THE ACADEMY.

First Lieut. JAMES L. LUSK, Corps of Engineers, adjutant.

Capt. WILLIAM F. SPURGIN, Twenty-first Infantry, treasurer, quartermaster and commissary of cadets.

First Lieut. GEORGE E. BACON, Sixteenth Infantry, acting commissary of subsistence.

Maj. CHARLES F. ALEXANDER, surgeon.

Capt. ROBERT H. WHITE, assistant surgeon.

ACADEMIC STAFF.

DEPARTMENT OF THE SPANISH LANGUAGE.

FRANCIS DE JAXON, professor.

First Lieut. JAMES O'HARA, Third Artillery, assistant professor.

DEPARTMENT OF NATURAL AND EXPERIMENTAL PHILOSOPHY.

PHILIP S. MICHE, Ph. D., professor.

Capt. CLINTON B. SEARS, A. B., Corps of Engineers, assistant professor.

First Lieut. EZRA B. FULLER, Seventh Cavalry, } Acting assistant professors

First Lieut. ARTHUR MURRAY, First Artillery, }

DEPARTMENT OF THE FRENCH LANGUAGE AND ENGLISH STUDIES.

GEORGE L. ANDEWS, A. M., professor.

First Lieut. JOHN R. WILLIAMS, Third Artillery, assistant professor.

Second Lieut. JOHN T. FRENCH, Jr., Fourth Artillery, }

Second Lieut. JOHN H. PHILLIPS, Jr., Eleventh Infantry, } acting assistant professors.

Second Lieut. JOHN BIGELOW, Jr., Tenth Cavalry, }

Second Lieut. GEORGE P. SCRIVEN, Third Artillery, }

DEPARTMENT OF HISTORY, GEOGRAPHY, AND ETHICS.

Rev. JOHN FORSYTH, D. D., LL. D., chaplain and professor.

First Lieut. ERIC BERGLAND, Corps of Engineers, assistant professor of ethics.

DEPARTMENT OF CIVIL AND MILITARY ENGINEERING.

JUNIOR B. WHEELER, professor.

First Lieut. WILLARD YOUNG, Corps of Engineers, assistant professor.

First Lieut. SOLOMON W. ROESSLER, Corps of Engineers, acting assistant professor.

DEPARTMENT OF DRAWING.

CHARLES W. LARNED, professor.

First Lieut. CHARLES A. WORDEN, Seventh Infantry, assistant professor.

Second Lieut. EDWARD E. GAYLE, Second Artillery, } acting assistant professors.

Second Lieut. JAMES S. PETTIT, First Infantry, }

DEPARTMENT OF MATHEMATICS.

EDGAR W. BASS, professor.

First Lieut. JOHN T. HONEYCUTT, First Artillery, assistant professor.

First Lieut. WILLIAM M. MEDCALFE, Ordnance Department, }

First Lieut. WILLIAM CROZIER, Ordnance Department, }

Second Lieut. HENRY H. LUDLOW, Third Artillery, }

Second Lieut. SOLON F. MASSEY, Fifth Artillery, }

Second Lieut. DOUGLAS A. HOWARD, Third Artillery, }

Second Lieut. JAMES E. RUNCIE, First Artillery, }

acting assistant professors.

DEPARTMENT OF LAW.

GUIDO N. LIEBER, major and judge-advocate, professor.

First Lieut. ERIC BERGLAND, Corps of Engineers, acting assistant professor.

DEPARTMENT OF TACTICS.

Lieut. Col. HENRY M. LAZELLE, major First Infantry, commandant of cadets and instructor of tactics.

Capt. MARCUS P. MILLER, Fourth Artillery, assistant instructor of artillery tactics.

Capt. EDWARD S. GOLDBEY, Seventh Cavalry, assistant instructor of cavalry tactics.

First Lieut. EDWARD J. MCCLENNAND, Second Cavalry, assistant instructor of artillery and cavalry tactics.

First Lieut. EDWARD W. CASEY, Twenty-second Infantry, assistant instructor of infantry tactics.

Second Lieut. QUINCY O'M. GILLMORE, Eighth Cavalry, assistant instructor of cavalry tactics.

Second Lieut. EDWARD S. FARROW, Twenty-first Infantry, assistant instructor of infantry tactics.

DEPARTMENT OF CHEMISTRY, MINERALOGY, AND GEOLOGY.

SAMUEL F. FILLMAN, professor.

First Lieut. JOHN P. WISSEN, First Artillery, assistant professor.

First Lieut. JOSEPH S. OYSTER, First Artillery, }

Second Lieut. LEONARD A. LOVERING, Fourth Infantry, } acting assistant professors.

DEPARTMENT OF ORDNANCE AND GUNNERY.

Major CARRON COMLY, Ordnance Department, instructor.

First Lieut. CHARLES H. CLARK, Ordnance Department, assistant instructor.

DEPARTMENT OF PRACTICAL MILITARY ENGINEERING, MILITARY SIGNALING AND TELEGRAPHY.

Capt. WILLIAM S. STANTON, Corps of Engineers, instructor.

First Lieut. HENRY S. TABER, Corps of Engineers, assistant instructor of practical military engineering.

1. CHARLES A. WORDEN, Seventh Infantry, assistant instructor of military and telegraphy.

2. JOSEPH W. BENTLEY, master of the sword.

TROOPS

BATTALION OF CADETS.

1. HENRY M. LAZELLE (major, First Infantry), commandant of cadets, commanding.

2. A. Capt. MARCUS P. MILLER, Fourth Artillery, commanding.

3. B. First Lieut. EDWARD W. CASEY, Twenty-second Infantry, commanding.

4. C. Second Lieut. EDWARD S. FARROW, Twenty-first Infantry, commanding.

5. D. First Lieut. EDWARD J. MCCLEARN, Second Cavalry, commanding.

COMPANY K, BATTALION OF ENGINEERS.

1. WILLIAM S. STANTON, Corps of Engineers, commanding.

2. HENRY S. TARKER, Corps of Engineers, attached.

UNITED STATES MILITARY ACADEMY DETACHMENT OF ORDNANCE.

1. JOHN COMLY, Ordnance Department, commanding.

UNITED STATES MILITARY ACADEMY DETACHMENT OF CAVALRY.

1. EDWARD S. GODFREY, Seventh Cavalry, commanding.

UNITED STATES MILITARY ACADEMY DETACHMENT OF ARTILLERY.

1. GEORGE E. BACON, Sixteenth Infantry, commanding.

UNITED STATES MILITARY ACADEMY BAND AND DETACHMENT OF FIELD MUSIC.

1. JAMES L. LASK, Corps of Engineers, commanding.

ALTERATIONS SINCE LAST ROSTER.

JOINED.

John Comly, Ordnance Department	August	21, 1871
Marcus P. Miller, Fourth Artillery	August	21, 1871
William S. Stanton, Corps of Engineers	August	21, 1871
Edward W. Casey, Twenty-first Infantry	September	2, 1871
Edward S. Farrow, Seventh Cavalry	August	27, 1871
Arthur Murray, First Artillery	July	1, 1871
Edward A. Lovering, Fourth Infantry	August	27, 1871
Edward L. Gayle, Second Artillery	August	27, 1871
Edward S. Farrow, Twenty-first Infantry	February	23, 1871
Douglas A. Howard, Third Artillery	September	3, 1871
John Miller, Corps of Engineers	July	3, 1871
Edward O. Brown, Corps of Engineers	July	5, 1871
Edward St. J. Grebb, Second Artillery	July	5, 1871
Second Lieut. Albert C. Blunt, Third Artillery	July	5, 1871
Second Lieut. Britton Davis, Fifth Cavalry	July	5, 1871

REMOVED.

Major De Barry, commissary of subsistence	October	1, 1871
John Moulton, Ordnance Department	August	21, 1871
Charles P. Piper, Fourth Artillery	August	21, 1871
Charles W. Raymond, Corps of Engineers	August	21, 1871
John G. D. Knight, Corps of Engineers	August	21, 1871
George S. Anderson, Sixth Cavalry	August	21, 1871
James Rockwell, Jr., Ordnance Department	August	27, 1871
Frank Miller, Fifth Cavalry	March	30, 1871

First Lieut. Dan C. Kingman, Corps of Engineers	August	28, 18
First Lieut. Benjamin H. Randolph Third Artillery	June	4, 18
First Lieut. Orin H. Mitcham, Ordnance Department	August	28, 18
Second Lieut. William H. Coffin, Fifth Artillery	February	23, 18
Second Lieut. Howard A. Springett, Fourth Artillery	August	28, 18
Second Lieut. Edward B. Ives, Nineteenth Infantry	August	28, 18
Second Lieut. John Milles, Corps of Engineers	August	28, 18
Second Lieut. Edward O. Brown, Corps of Engineers	July	31, 18
Second Lieut. Edwin St. J. Greble, Second Artillery	August	28, 18
Second Lieut. Britton Davis, Third Cavalry	August	28, 18
Additional Second Lieut. Albert C. Blunt, Third Artillery	August	28, 18
First Lieut. Charles E. S. Wood, Twenty-first Infantry, A. D. C., from duty as adjutant of the Military Academy, &c	September	8, 18
First Lieut. James L. Lusk, Corps of Engineers, from duty in the department of mathematics	September	8, 18

PROMOTED.

Second Lieut. Solomon W. Roessler, Corps of Engineers, to be first lieutenant, Corps of Engineers, to date	December	31, 18
Second Lieut. John R. Williams, Third Artillery, to be first lieutenant, Third Artillery, to date	March	15, 18
Second Lieut. William M. Medcalf, Fourth Artillery, to be first lieutenant, Ordnance Department, to date	March	18, 18
Second Lieut. James L. Lusk, Corps of Engineers, to be first lieutenant, Corps of Engineers, to date	June	14, 18
Second Lieut. William Crozier, Fourth Artillery, to be first lieutenant Ordnance Department, to date	August	11, 18
Additional Second Lieut. Britton Davis, Fifth Cavalry, to be second lieutenant, Third Cavalry, to date	July	1, 18

APPOINTED.

Capt. Charles H. Hoyt, assistant quartermaster, appointed disbursing officer Military Academy	August	23, 18
Capt. William F. Spurgin, Twenty-first Infantry, appointed treasurer Military Academy, and quartermaster and commissary of cadets	September	2, 18
First Lieut. Charles E. S. Wood, Twenty-first Infantry, A. D. C., appointed adjutant Military Academy	February	24, 18
First Lieut. Charles E. S. Wood, Twenty-first Infantry, A. D. C., appointed acting judge-advocate of the Department of West Point	September	8, 18
First Lieut. James L. Lusk, Corps of Engineers, appointed adjutant of the Military Academy	September	8, 18
First Lieut. John I. Honeycutt, First Artillery, appointed assistant professor of mathematics	August	29, 18
First Lieut. Willard Young, Corps of Engineers, appointed assistant professor of engineering	August	29, 18
First Lieut. Charles H. Clark, Ordnance Department, appointed assistant instructor of ordnance and gunnery	August	29, 18
First Lieut. John R. Williams, Third Artillery, appointed assistant professor of the French language and english studies	August	29, 18

TRANSFERRED.

Second Lieut. John T. French, jr., Fourth Artillery, from department of the Spanish language to department of the French language and English studies	August	28, 18
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Relative rank of officers serving in the Department of West Point.

Rank	Corps or regiment	Highest brevet rank	Duties
GENERAL			
Frederick D.	United States Army	Major general	Superintendent commanding
BRIGADIER-GENERAL			
Henry M.	Major First Infantry		Commandant of cadets
COLONEL			
Charles F.	Surgeon	Lieutenant colonel	Senior medical officer instructor of ordnance and gunnery
John	Ordnance Department	....
LIEUTENANT COLONEL			
John P.	Fourth Artillery	Lieutenant colonel	Assistant instructor of artillery tactics
John H.	Assistant Quartermaster	....	Chief and post quartermaster
John H.	Assistant Surgeon	....	Assistant surgeon
John S.	Engineers	....	Instructor of practical military engineering
William J.	Twenty first Infantry	Major	Lieutenant quartermaster and commissary of cadets
Edward S.	Seventh Cavalry	....	Assistant instructor of cavalry tactics
John R.	Engineers	....	Assistant professor of philosophy
LIEUTENANT			
John	Third Artillery	....	Assistant professor of Spanish
John	Fourteenth Infantry	Captain	Aide de camp and acting assistant adjutant general
John	Engineers	....	Assistant professor of ethics and law
John S.	do	....	Assistant instructor practical military engineering
John B.	Seventh Cavalry	....	Acting assistant professor of philosophy
John	First Artillery	....	Do.
John L. S.	Twenty first Infantry	....	Aide de camp and acting judge advocate
Charles A.	Seventh Infantry	....	Assistant professor of drawing
John Edward J.	Second Cavalry	....	Assistant instructor of infantry and cavalry tactics
John I.	First Artillery	....	Assistant professor of mathematics
John	Engineers	....	Assistant professor of civil and military engineering
John E.	Sixteenth Infantry	....	Acting commissary of subsistence
John W.	Twenty second Infantry	....	Assistant instructor infantry tactics
John P.	First Artillery	....	Assistant professor of chemistry &c
John S.	do	....	Acting assistant professor of chemistry
John H.	Ordnance Department	....	Assistant instructor of ordnance and gunnery
John W.	Engineers	....	Acting assistant professor of civil and military engineering
John R.	Third Artillery	....	Assistant professor of French language &c
William M.	Ordnance Department	....	Acting assistant professor of mathematics
John L.	Engineers	....	Assistant Military Academy
John	Ordnance Department	....	Acting assistant professor of mathematics
LIEUTENANT			
John O. M.	Eighth Cavalry	....	Assistant instructor of cavalry tactics
John H.	Third Artillery	....	Acting assistant professor of mathematics
John T. Jr.	Fourth Artillery	....	Acting assistant professor of French language &c
John A.	Fourth Infantry	....	Acting assistant professor of chemistry &c
John E.	Second Artillery	....	Acting assistant professor of drawing
John S.	Twenty first Infantry	....	Assistant instructor infantry tactics
John F.	Fifth Artillery	....	Acting assistant professor of mathematics
John H.	Eleventh Infantry	....	Acting assistant professor of French language &c
John Jr.	Tenth Cavalry	....	Do.
John P.	Third Artillery	....	Do

Relative rank of officers serving in the Department of West Point—Continued.

Names and rank	Corps or regiment	Highest brevet rank	Duty
Pettit, James S	First Infantry . .	.....	Acting assistant professor of
Howard, Douglas A . . .	Third Artillery . .		Acting assistant professor of
			mathematics.
Rancie, James E	First Artillery.....		Do.

Relative rank of professors of the United States Military Academy.

Names and rank.	Department
COLONELS	
De Janon, Patrick	Spanish language
Michler, Peter S	Natural and experimental philosophy
Anders, W. A. George L.	French language and English studies
Forrest, John	Chaplain. History, geography and ethics.
Wheeler, Junius R	Civil and military engineering
LIEUTENANT COLONELS	
Larned, Charles W	Drawing
Boas, Edgar W	Mathematics.
Lieber, Guido N. Judge-advocate	Law
Tillman, Samuel E	Chemistry, mineralogy and geology

7.—REPORT OF COL. GEORGE W. GETTY.

HEADQUARTERS UNITED STATES ARTILLERY SCHOOL,
Fort Monroe, Va., October 26, 1881.

SIR: I have the honor to submit my annual report on the operations of the artillery school for the past year.

In my report for 1880 I have given an account of the present organization of the school, and have also exhibited the code of regulations under which its service is performed. I therefore deem it to be unnecessary to say more in that regard in this paper than to invite attention to the fact that the time embraced herein is a continuation of the term of two years, which commenced in May, 1880, and expires in May, 1882.

Last year's report left my hands while the instruction pertaining to the division of the school known as the department of engineering was in progress; that is, part of the class of officers was engaged upon actual reconnaissance of the country in the vicinity of Gloucester Court House, Va., under Capt. Lorenzo Lorain, Third Artillery (at that time in immediate charge of the department), and part under Capt. J. M. Chester, Third Artillery, assistant instructor, were prosecuting a similar topographical survey of Yorktown and vicinity, in compliance with a request from the Congressional Committee on the Yorktown Campaign.

With reference to the former, I have the honor to report that the work was most satisfactorily performed, but that I am unable to exhibit the result at this moment, because the work of compiling the map has unfortunately been delayed by unforeseen causes. It is in progress, however, and when finished I shall forward a proper copy for your information. With reference to the latter, I am happy to be able to report the production of as correct and beautifully executed a map as has ever

notice in many years, and I cannot say too much in testimony of great and painstaking accuracy with which the gentlemen who were employed upon this survey have performed the task allotted to them, especially as it was somewhat outside of what is contemplated in the present arrangement of the school.

For this survey I have received, for the gentlemen who made it, a resolution of thanks by the honorable committee who had requested it. Necessary steps are now being taken to produce at the school photo lithographic copies of the map, which, when finished, I shall have pleasure in forwarding. The map has been already used by the honorable committee in locating various historical points and in purchasing the site of the Yorktown monument, while copies of certain sections have been loaned to those officers of the general staff who have been employed in completing the military dispositions for the centennial which is about to be celebrated.

I have said that the survey of Yorktown was somewhat outside of what is contemplated in the present arrangement of the school, because the delicately adjusted instruments which are necessary to success in solar planimetry are not at hand, and, if they were, the time demanded by a proper use of them cannot now well be spared. I wish it to be understood, however, that the importance of surveying is by no means lost sight of. In fact, it is my intention that this branch of study, in a military sense, and the practical application of it particularly, shall receive the fullest development possible, because the importance of the part in warfare played by ground, and the extreme utility to an officer of a good ready method of procuring intelligence, is too glaringly apparent to be in the least neglected in any military school of application. The remainder of the time allotted to the department of engineering, from 1st of December, 1880, until 20th of December, 1880, was devoted to practical work in engineering (including practical photography), in conformity with the regulations, during which time each of the officers were required to prepare in addition an essay on the attack and defense of a sea coast, the locality chosen being Fort Monroe, Va., and the class being equally divided on the offensive and defensive sides.

The examination in the department of engineering took place on the 20th and 21st of December, being both written and practical. The results were eminently satisfactory and will form the subject of a special report.

The report of the officer in temporary charge of this department, Lieutenant Harris, First Artillery, will be found in Appendix A, which will supply the details of the work performed.

The department of engineering has met with a serious loss this year in the promotion of Major Lorain, First Artillery. To this officer is largely due the development of this branch of the school as it stands to-day, and it is my duty to say that I have been compelled to part with him with many regrets at being deprived of his valuable assistance.

DEPARTMENT OF ARTILLERY.

The time allotted to this department of study extends from January to September 1st of the second year of the term. It is under the supervision of Maj. Richard Loder, Third Artillery, who has been assisted by Capt. M. P. Miller, Fourth Artillery, and First Lieut. L. A. Chambliss, First Artillery, and in the chemical branch by First Lieut. H. L. Harris, First Artillery. As the time for regular work in this course had arrived when my last report was made, I deem it essential to invite

attention to the following extracts from the reports of officers in charge in order that they may speak for themselves. The full reports are in Appendixes B, C, and D.

[Extract.]

FORT MONROE, VA., September 1st, 1881.

To the ADJUTANT OF THE UNITED STATES ARTILLERY SCHOOL,

Fort Monroe, Va. :

SIR: I have the honor to forward the reports of Capt. M. P. Miller, Fourth Artillery, and Lieutenant Harris, First Artillery, instructors in my department.

From January 5, 1881, the officers under instruction in artillery were detailed, as they could be spared from the section room and laboratory work, to report for special instruction in electricity and the use of velocity machines—the chronograph under the charge of Lieutenant Osgood and the bombange under the charge of Lieutenant Mills—as well as the use of the mercury densimeter, of Mallet's and DuRoi's gravimeter. Lieutenant Chamberlin, First Artillery, was my assistant, and had general charge.

The officers were practiced in testing wires, lines, batteries, cells, sounders, densimeter, &c. The use of the galvanometer and rheostat, arrangement of wires, instruments for firing, comparison and arrangement of cells, and the velocity measurements referred to were freely used, until all became familiar with the work and handy manipulation.

The officers took great interest in this work, and two of them, Lieutenant Prescott and Lieutenant Gordon, were engaged in a special effort to obtain the velocities at beginning and end of the trajectory of a 3' muzzle-loading rifle projectile.

In the sea coast firing, during the months of July and August, the greatest possible care was taken to make it thoroughly available for future reference.

All the circumstances which might affect the range or deviation were taken into account. A telegraph line, or cable, from the shore to the "rip-raps," out of order and unused, belonging to the Western Union Telegraph Company, was under run, after three days' work was repaired and connected with my electrical office and sounder at the rip-raps. This arrangement enabled me to obtain the results of firing on the office plot within three minutes.

The electrical arrangements and the daily details of officers and men were so perfect that not a hitch occurred, and finally the firing was easily completed in the time allowed, without hurry, haste, or confusion.

The improvement over previous firing was manifested in the number of times the target was demolished; even the spar buoy was struck once at a distance of 100 yards.

A full description will be given in a separate report. Lieutenant Zalinski, First Artillery, had charge of the observations of wind deviation, and will make a report of this as well as regards the particular sights used.

Torpedoes should be furnished, not for experiment, but for practice. Six or eight, with connections and arrangements as perfected by General Abbott, at Willets Point, with his instructions for their use, should certainly be allowed us, for it is concluded that artillery officers would have to use them, in connection, probably, with the engineers. Artillery officers are detailed for Willets Point for instruction, and, in any case, there is no reason, then, why it should not be kept in practice here. It should be prepared when the time comes—not wait until the time comes to prepare.

In conclusion, I must mention the valuable services of Lieut. L. A. Chamberlin, First Artillery, my assistant in electricity. He spared neither time nor trouble and performed his duties with great intelligence.

I am, sir, your obedient servant.

R. L. LORR.

Major Third Artillery,

Superintendent of Theoretical Artillery, Electricity and Sea coast Firing.

[Extract.]

FORT MONROE, VA., August 19, 1881.

The ADJUTANT UNITED STATES ARTILLERY SCHOOL,

Fort Monroe, Va. :

SIR: I have the honor to submit the following report of the artillery instruction under my charge during the year ending July 31, 1881.

It was carried out in accordance with the programme, embracing the scientific

artillery, viz, gunpowder and other military explosives; construction of artillery projectiles; tests the most modern; determining velocities and trajectories; preservation and inspection of ordnance; analysis of gunpowder, &c.

Re-statements were made daily, Saturdays and Sundays excepted. Two officers at a time were detailed to attend the laboratory there, to practically analyze gunpowder, and to make nitro glycerine, until the whole class had completed the laboratory course.

Officers were also detailed, as the superintendent of artillery instruction, Maj. R. Loder, Third Artillery, directed, at the electrical and Schultze's chronoscope rooms, the practical and the electrical course.

The text-books used were Benton's Ordnance and Gunnery; Maj. R. Loder's Pamphlet on Explosives; Bashforth's Formulae, and selected parts of the Ordnance Reports, Chief of Ordnance, of 1876, 1877, 1879 and Ordnance Memoranda 21 and 22, and the notes is given in my letter of November, 1880, to the staff of the school.

In addition, upon the receipt of Report of the Chief of Ordnance of 1880, certain subjects matter, viz, the description of 3-18 breech loading rifles and carriage, the standard guns, physical properties of metals, gun metals, the manufacture of rifled projectiles; Rodman's testing machines, and other subjects, were taken from that and studied by the class; also two Ordnance Notes, 140 and 145, the first embracing the subject of "Bursting of heavy guns," the second, the one of modern artillery.

Each officer was required to work out, by Didion's and Bashforth's method, the trajectory of the rifle projectile fired with a given initial velocity and elevation, the elevation being different in each case, and to plot the same, showing the distance to a vessel of given dimensions. The general progress of the class, considering the length of the course the difficult matter embraced in it—was excellent.

Very respectfully, your obedient servant,

M. P. MILLER.

Captain Fourth Artillery, Instructor.

[Extract]

FORT MONROE, VA., September 19, 1881.

In accordance with the regulations of the school, I have the honor to submit the following report of progress in the chemical branch of the course during the year ending September 30, 1881.

The present laboratory is convenient for work, is suitably fitted up, and is sufficiently well equipped with apparatus and chemicals to carry on any ordinary simple course.

The officers under instruction were sent to the laboratory in sets of two, from January 6 until June 21 of this year, each officer remaining 12 days and making analyses (gunpowder employing both gravimetric and volumetric analyses), and an elementary analysis of food to determine the percentage of moisture, the percentage and quality of nitrogen contained in it, and the amount of starch by difference. This was an extension of the course of the preceding year—a progression which could gradually be increased to advantage.

Each officer also made a sample of nitro glycerine.

Reports of the analysis in each case were made to the instructor, and at the close of laboratory work the officers were questioned on the course, so that it should be thoroughly understood.

Very respectfully, your obedient servant,

HENRY L. HARRIS,

First Lieut., First Artillery, in Charge of Laboratory

Examination in this course of instruction was held on the 29th and 30th of June, in accordance with the code of regulations, a special report upon which is to be forwarded.

DEPARTMENT OF MILITARY ART.

This department is under the supervision of Maj. L. L. Livingston, Fourth Artillery, and Capt. J. H. Calef, Second Artillery, instructor. The time allotted to it extends from September 1, second year, to January 15, and it embraces theoretical and practical instruction in military history, military geography, infantry, and grand tactics. As the course

commenced only with the month of September last, but little can as yet be reported upon regarding it. As an illustration of the scope of a portion of the work involved, I insert below an order governing the preparation of the written theses which are required during the course from each officer.

[General Orders No. 15.]

HEADQUARTERS UNITED STATES ARTILLERY SCHOOL,

Fort Monroe, Va., September 1, 1881.

1. In the preparation of essays in the department of military art, which are required by page 5, Code of Regulations, 1880, the following boundary, which is circulated to all the staff of the school, in the determination of relative merit, as well as to establish uniformity of practice in this department of study will hereafter be observed as far as practicable, viz:

STUDY OF A CAMPAIGN AND SUMMARY OF BATTLE

INTRODUCTION.—Causes of the war; anterior events, if any.

PART I.—Military institutions of the belligerents; standing army, reserves, and the organization of active armies; details of the various arms, their instruction, their equipment. Mobilization of the troops, or passage from the peace to the war footing; measures taken, time occupied. Concentration of the armies on the frontiers, by marches or railway transportation.

PART II.—Study of the ground from a geographical point of view. The theater of war as a whole. Particular theater of operations in the campaign studied; its limits, its topographic accidents, direction, character and description of the mountain chains, its hydrographic accidents, rivers and their affluents, canals. Its means of communication, roads, railway routes, and course of navigable waters. Its important ports, cities, strong places, natural connections, bridges and artificial lines of communication. Trace of the frontier between the belligerent States; its description, means of defense, natural and artificial obstacles. General details of the climate, the population and the resources of the country.

PART III.—Strategic operations, objective and strategic points of the campaign. Basis of operations of the armies opposed to each other; lines of defense of the defensive army. Lines of operation of the two armies; employment of the railroads. Plan of campaign offensive and defensive, combinations adopted in each. Marches and victories by the offensive army, marches and retreats by the defensive army.

PART IV.—Tactical operations. Study of the battle fields and of the positions of the two armies. Study of the orders of battle. Study of the engagements at their various periods, and of their consequences; that is, the retreat of the beaten and pursuit of the victorious army.

CONCLUSION.—Summation of the facts studied stating precisely the character and signaling their results.

2. This programme, which is not absolute, may be varied in conformity with the nature of the operations studied. In all cases it will be necessary, as far as possible, to seek out particularly the proofs and illustrations, such as the orders, reports and correspondence of the generals. It will also be necessary to study the maps, to examine with care, and make an effort to discover the truth anywhere in indicating the effect or application of principles, and consequently the causes of reverses or successes.

The essay should be accompanied by a tracing or sketch presenting the theater of operations and reproducing the principal geographical accidents, such as a line of communication described in Part II. It will be necessary further to give a tracing or sketch of the fields of battle on a scale large enough to indicate the dispositions of the two armies at the principal periods of battle, and all other details which will facilitate understanding the paper.

3. The following are regarded as the principal periods of battle, viz:

IN AN OFFENSIVE BATTLE.—*First period*, the army takes its preparatory order of battle; then, after reconnaissances and preparations for action, passes to its order of battle. *Second period*, the army executes its partial attacks, directing them against certain parts of the enemy's order of battle. The success of the partial attack leads to the general attack, which has for its object to overthrow the enemy and drive him from his position. *Third period*, the army establishes itself upon the conquered position and prepares the pursuit.

IN A DEFENSIVE BATTLE.—The *first period* comprises the occupation of the position and the deployment of a first line; afterwards it comprises the covering of the principal points menaced by the enemy when he is in his turn deployed and commences to prepare his attacks. The *second period* comprises two principal movements, the first

stance of the enemy's partial attacks; the second for the resistance of the attack. The *third period* comprises the evacuation of the position and a tactical march in order to reform the army at its rallying position.

Conventional signs to be used in the representation of battle fields are ap-

proved by Bvt. Major-General Getty.

CONSTANTINE CHASE,

First Lieutenant, Third Artillery, A. D. C., and Adjutant.

DEPARTMENT OF LAW AND MILITARY ADMINISTRATION.

The department is under the immediate charge of Capt. S. S. Elder, Artillery, but the time for its work will not arrive until January 10. Essential for the rendition of a complete report to record here, in previous years, drills at all classes of artillery take place except Saturdays and Sundays and such times as are devoted to any instruction; also that practice in small arms firing receives the time and attention which can be given to it. The latter is, however, interrupted, though not seriously, at the times of artillery practice; the want of the range and scarcity of men compelling it.

DIVISION FOR ENLISTED MEN.

In the past year this branch of the school has been successful in being under Capt. W. F. Randolph, Fifth Artillery, and First Lieut. Webb, Second Artillery, instructor.

I consider it essential, however, to repeat my remarks of last year, in relation to the necessity of keeping up a rotation of enlisted men attending upon this division by sending for a year's instruction from each school a number of recruits destined for the artillery, and then assigning them to the service batteries. I also recommend that the policy of transferring, from time to time, enlisted men already being in the instruction batteries to the service batteries, thus giving a continual change to the school in the matter of enlisted men. But in recommending this action I do not refer to a change of the instruction batteries as organizations which would entail a transfer of officers to retain proper instructors at the school.

The graduating class of enlisted men of last term is shown in the following general order:

(General Orders No. 9.)

HEADQUARTERS UNITED STATES ARTILLERY SCHOOL,

Fort Monroe, Va. May 14, 1881.

Following is the standing of the enlisted men under instruction, as determined by the United States Artillery School, at the examination of May, 1881.

Names						
	Mathematics	History	Geography	Tactics	Promerit	General merit
Marshall Battery C Fifth Artillery	1	1	2	2	2	1
McClellan Battery I Fourth Artillery	2	2	1	1	2	2
Panzer Battery K Second Artillery	4	3	3	6	1	3
W. C. Custer Battery K Second Artillery	5	4	7	7	7	4
Van Fleet Battery A Third Artillery	6	5	8	3	9	5

P. S. Matthews, Battery I, Fourth Artillery, not sufficiently advanced to graduate.

Private John Shirkley, Battery C, Fifth Artillery, not sufficiently advanced to receive certificate.

Private Louis Hopf, Battery C, Fifth Artillery, not sufficiently advanced to receive certificate.

Private Charles Enchor, Battery K, Second Artillery, not sufficiently advanced to receive certificate.

Four enlisted men attending school were not examined with this class, having previously received certificates.

Fifteen enlisted men in primary class not examined.

By order of Bvt. Major-General Getty.

CONSTANTINE CHASE,

First Lieutenant, Third Artillery, Adjutant

The present class numbers 25, and is in temporary charge of First Lieut. H. L. Harris, First Artillery, who performs this in addition to his regular duties.

Having thus sketched the work at the school, the amount of which is really greater than the length of this report will warrant a full exhibition of, I deem it to be my duty to express regret that it has been found expedient to make so many changes in the *personnel* of officers as have occurred in the past year. The school has lost nine officers and gained two, four of the former being of the class under instruction. While I would in no way wish to be understood as assuming an attitude for the school which is not in the most cheerful conformity with the best interests of the service at large, or which is not calculated to assist individual officers in their professional advancement, I cannot but draw attention to what would appear to be conducive to great embarrassment and discouragement to the school if allowed to become a precedent for future practice. The officers who have been selected for instructors and assistant instructors are those who, all things considered, have possessed special fitness for the duties assigned them; but as such duties demand study and experience for their efficient performance at a school of application, I submit that it might be in the interest of progress if some definite policy in regard to their tour of duty were indicated, so as to insure their timely replacement should more important interests demand their removal.

I also wish to draw particular attention to the recommendation in Major Lodor's report concerning the service of torpedoes, and to renew my own, made in former reports, in reference to the same subject. As I view it, too much practical knowledge of torpedo warfare cannot exist among artillery officers, and I fail to apprehend why there can be objection to at least enlarging their facilities for gaining it.

In another communication I have made known the necessity for a suitable fire proof building for the school library, which I have reason to think has met with favorable consideration. I cannot, therefore, do more than mention this need here.

Experience has shown the desirability of a certain rearrangement of the various courses of study in view of making the course of instruction still more practical than at present; but as it is a matter for careful deliberation, I must reserve the presentation of it until another hour.

I am, sir, very respectfully, your obedient servant,

GEO. W. GETTY,

Col. Third Artillery, Bvt. Maj. Gen. U. S. A.

The ADJUTANT GENERAL U. S. ARMY,

Washington, D. C.

REPORT OF THE ADJUTANT-GENERAL.



REPORT OF THE ADJUTANT-GENERAL.

WAR DEPARTMENT,
ADJUTANT GENERAL'S OFFICE,
Washington, October 25, 1881.

SIR: I have the honor to submit my annual report for the year ending September 30, 1881.

MILITIA.

Deeming it unnecessary to reiterate the expression of my deep sympathy with everything that affects the well being and development of the militia, I beg to invite your attention to the necessity of legislative authority to extend to the militia of the several States such aid, by furnishing them, on requisitions of the respective adjutant generals, the tactical works and blank forms and books prescribed for the regular Army, as will still further assimilate the management, drill, and internal government of the two forces, due regard being always had to the fundamental conditions of their respective existence.

The Fourth Brigade of the South Carolina Volunteer troops, contemplating holding, in April last, a competitive drill between the artillery and infantry companies of the command, requested the detail of Army officers to act as judges; and in compliance with the request an officer was selected by the commanding general of the Department of the South to act as judge on the occasion.

It is greatly regretted that the non receipt of any report from the officer selected to act as judge deprives me of the opportunity of placing on record his judgment, as well as, I doubt not, his recognition of the increasing interest manifested in military matters by the several organizations of the State troops of South Carolina participating in this friendly contest of skill and tactical knowledge.

At the request of the authorities of the States of Massachusetts, Connecticut, and Rhode Island, officers of the regular force were detailed to inspect the camps and troops of those States. From causes incident to the perturbed state of the country consequent on the assassination of the late President, and the movements of troops connected, later, with the Yorktown centennial celebration, the reports of the officers detailed have not been received in time to be incorporated with this report, and it only remains for me to express the confident hope that the bright expectations raised by the inspection reports of last year have not only been realized, but indicate still the justification of greater hopes.

MILITARY COLLEGES.

The subjoined table exhibits the apportionment of details corrected up to October 1, 1881. The reports of the several officers detailed as

professors of military science at the several universities and colleges show that, out of upwards of 3,600 youths over the age of 15, an average attendance has been secured as follows: Artillery drill, 563; infantry drill, 1,853, or over one-fifth of the entire number of students for the first and over one half for the last, besides attendance at recitations and lectures on military points of interest. The average aptitude of pupils is reported very good, while the interest manifested by the respective faculties is steadily increasing as they realize the fact that, while military instruction does not, in anywise, interfere with the ordinary curriculum of studies at the several institutions, it proves of marked benefit in maintaining a high degree of discipline and materially affects the bearing and tone of the students.

States and groups.	Aggregate population of States and groups.	No of officers which entitles to State or group.	Officers detailed.	Colleges &c at which detailed.	Expiration of detail.
Maine	448,946		First Lieut. M. Crawford, jr. Second Artillery	Rowdola College Brunswick Me	July 1, 1882
New Hampshire	246,984		First Lieut. H. E. Tuttle, First Cavalry	University of Vermont Burlington	July 1, 1884
Vermont	132,286		Second Lieut. V. H. Brigham Second Artillery	Massachusetts Agricultural College Amherst	July 1, 1884
Massachusetts	1,783,312				
Connecticut	1,623,483				
Rhode Island	276,328				
	4,010,478	3			
New York	5,083,810	3	First Lieut. J. W. Mac Murray First Artillery First Lieut. J. R. Burlbank Third Artillery Second Lieut. Wm. S. Patten Eighteenth Infantry	Union College, Schenectady Cornell University Ithaca Riverside Academy Poughkeepsie	July 1, 1883 July 1, 1884 July 1, 1884
Pennsylvania	4,262,786		First Lieut. W. P. Duvall Fifth Artillery	Pennsylvania Military Academy Chester	July 1, 1884
New Jersey	1,110,983		First Lieut. Geo. D. Webster Fourth Infantry	Allegheny College Meadville Pa	July 1, 1883
Delaware	146,674		First Lieut. S. N. Holmes Thirteenth Infantry	Rutgers College New Brunswick, N. J.	July 1, 1883
Maryland	934,652		Second Lieut. Bogardus Eldridge Tenth Infantry	Maryland Agricultural College	July 1, 1884
	6,493,055	4			
West Virginia	618,449		Second Lieut. Geo. L. R. Brown Eleventh Infantry	Hampton Normal and Agricultural Institute Hampton Va	July 1, 1884
Virginia	1,512,808		Capt. G. W. Evans, Twenty first Infantry	Carolina Military Institute Charlotte, N. C.	July 1, 1883
North Carolina	1,400,347				
	3,531,296	2			
South Carolina	695,023		First Lieut. Geo. S. Hoyle, First Cavalry	N. Georgia Agricultural College Dalton Ga	July 1, 1884
Georgia	1,540,048				
	2,534,670	1			
Florida	267,351				
Alabama	1,262,784				
	1,530,145	1			
Mississippi	1,131,592		Second Lieut. E. B. Bolton Twenty third Infantry	Agricultural and Mechanical College of Mississippi Starkville	July 1, 1885

Table showing apportionment of details at colleges, universities, &c., under section 1225, Revised Statutes—Continued.

States and groups	Aggregate population of States and groups	No of officers to which entitled	No on duty in State or group	Officers detailed	Colleges, &c. at which detailed	Expiration of detail.
Louisiana	940,103					
	2,071,605	1	1			
Texas	1,392,574					
Arkansas	802,504					
	2,395,138	1				
Tennessee	1,542,483	1	1	First Lieut R. M. Rogers Second Artillery	University of the South Sewanee	July 1, 1883
Kentucky	1,048,708	1	1	Second Lieut W. C. McFarland Sixteenth Infantry	Agricultural and Mechanical College of Kentucky, Lexington	July 1, 1884
Ohio	3,198,239	2	2	First Lieut Geo. Ruhlman Seventeenth Infantry	Ohio State University Columbus	July 1, 1884
Indiana	1,978,302	1	1	Second Lieut Geo. Andrews Twenty Fifth Infantry	Brooks Military Academy, Cleveland	July 1, 1884
Michigan	2,496,431	1	1	Second Lieut W. R. Hamilton Fifth Artillery	Indiana Ashbury University Greencastle	July 1, 1883
Illinois	3,078,739	2	2	Second Lieut George K. Cook Thirtieth Infantry	Michigan Military Academy Orchard Lake	July 1, 1882
				First Lieut H. I. Reed First Infantry	Illinois Normal University Carbondale	July 1, 1883
				Second Lieut W. T. Wood Eighteenth Infantry	Illinois Industrial University Champaign	July 1, 1883
Wisconsin	1,315,480	1	1	First Lieut John L. Clem Twenty fourth Infantry	Galesville University Galesville	July 1, 1882
Missouri	2,168,804	...		Second Lieut Jno J. Haden Eighth Infantry	University of Missouri Columbia	July 1, 1884
Kansas	995,986			Second Lieut Albert Todd First Artillery	State Agricultural College Manhattan, Kans	July 1, 1884
Colorado	134,649					
	1,539,419	2	2			
Iowa	1,024,020	..		First Lieut Geo. A. Thurston, Third Artillery	Iowa State University Iowa City	July 1, 1883
Minnesota	780,800					
Nebraska	432,461			First Lieut Isaac T. Webster, First Artillery	University of Nebraska, Lincoln	July 1, 1882
	2,857,850	2	2			
California	804,684					
Oregon	173,767					
Nevada	63,263			First Lieut. M. C. Wilkinson, Third Infantry	Tuslathin Academy and Pacific University, Forest Grove, Oregon	July 1, 1883

MILITARY PRISON.

The administration of the affairs of the military prison at Fort Leavenworth, Kans., during the past year has been in a marked degree successful. The views expressed by its originators and promoters, that such an institution would become an important factor in the discipline of the service, have been fully verified. The prisoners confined therein are only such as have been convicted of purely military offenses by general courts-martial, and who, under the wholesome restraint and discipline to which they are subjected, joined to the system of mechanical instruction adopted, are discharged at the expiration of their terms of confinement better fitted to re-enter the service or to become useful members of society.

During the fiscal year ending June 30, 1881, there were 373 men received into the prison and 273 discharged. But 1 death occurred during the year, and only 6 prisoners escaped during the same period. The actual number of men confined on June 30, 1881, was 447. The *resume* of the diversified labor of these men, taken from the reports of the prison officials, hereinafter noted, demonstrates the wisdom of the measures adopted, from an economical point of view, to keep them employed for the direct benefit of the Army. There still remain other industries to be introduced with the same end in view, so that there may be not a single case of enforced idleness. Thus far in the history of the institution a large number of the prisoners have been engaged in the work of constructing a circumvallating wall and upon the buildings within the prison yard.

The board of commissioners have made the inspections required by law; have, at each visit, afforded the prisoners the fullest opportunity to make such representations or complaints as they desired to present for consideration; have carefully noted the character of the punishments imposed by the prison authorities for violations of the established rules and regulations; the methods and kind of labor; the quality of food provided; and they have been fully satisfied, in all respects, with the condition and government of the prison. The governor, while on duty under his brevet rank of colonel, actually receives only the pay and allowances of his actual rank, viz, that of captain. Considering that his position demands the possession, in the incumbent, of administrative ability of the highest degree, combined with the rare mechanical powers required for the successful management of an institution embracing many and varied branches of industry, I most earnestly recommend that the local rank of colonel, with the pay and allowances of that grade, be attached to the office of the governor of the prison. This officer has a greater amount of labor and responsibility than any regimental commander. He governs and controls between 500 and 600 persons. Practically, he is at one and the same time the superintendent of a large manufacturing establishment, embracing diversified branches of industry, and the military director of all affairs within the prison. The adoption of the measure, not only suggested, but earnestly pressed from a pure sense of justice, would be a grateful recognition of the eminent services of an officer to whose zeal and fidelity, united to high executive and administrative ability, the success of the institution is almost wholly due.

I beg to renew the recommendation of last year that legislative authority be obtained to apply the earnings of the prison to its maintenance. A bill with this end in view was pending in the Senate last winter, and I sincerely hope it may become a law during the next session of Congress.

The improvements made during the fiscal year 1880-'81 were 1 set cottage quarters, one-story frame, 3 rooms, each 16 feet square; an extension to the prison shop building, two story, 24 by 46 feet, brick, with slate roof; a frame building, 16 by 36 feet, one and a half story; an addition of one room, 12 by 16 feet, to a set of quarters already occupied; 1,620 lineal feet of board fence around the cottage quarters, and near two miles of fencing around the prison farm. This farm fence was swept away by high water and rebuilt with old material. One set of cottage quarters (4 rooms each, 16 feet square) was in process of erection but not quite completed at the end of the year. A new floor of hard pine was laid in prison building No. 2, 37 by 97 feet.

The prison wall (except the coping) was completed, 186 feet being built during the year, making a total of 2,022 feet; and 381 feet of coping has been laid thereon. The stone for the wall has been quarried by prison labor on the military reservation, but the coping has not been purchased, there being no stone suitable for the purpose on the government land.

There were manufactured 34,163 pair of boots, 25,944 pair of shoes, 4,356 corn brooms, 1,656 barrack-chairs, 110 arm-chairs, 100 chair-rungs, 220 chair-bolts, 1,263 packing-boxes, 80 crates, 100 sets of four-mile ambulance harness, 75 sets of six-mile wagon harness, and, in addition to the above, all the doors, sashes, &c., for new buildings, and the work incident to the necessary repairs to buildings already erected. Ten thousand nine hundred and seventy bushels of lime have been, during the past year, burned and used in the erection of the buildings and walls and for sanitary purposes.

The cost per pair of boots and shoes manufactured during the year is, for boots, \$2.90; shoes, \$1.85; which includes cost of material, wages of foreman, and per diem allowances for prison labor.

The produce of the farm (although the latter was entirely inundated after the planting in the spring of 1881, and had to be replanted) amounted to 2,600 bushels of potatoes, 400 bushels of turnips, 3,900 heads of cabbage, 700 bushels of corn, 170 bushels of onions, 600 bushels of tomatoes, besides other vegetables, all grown by prison labor. About 50 acres are now under cultivation.

The work performed by prisoners for the Quartermaster's Department amounted to 30,241 days of skilled labor and 19,024 days of purely mechanical or unskilled labor.

The appropriation of \$55,910.80 has all been expended, the large amount being on account of permanent improvements.

I beg to invite your attention to the very full details and statistics of the operations of the prison for the past year, contained in the several reports, already submitted, made by the officers of the prison.

GOVERNMENT HOSPITAL FOR THE INSANE.

The following is a list of persons admitted into the above named institution, under orders of the Secretary of War, from October 1, 1880, to October 1, 1881:

Regular Army.

Commissioned officers.....	.....
Commissioned officers (retired) .....	.....
Enlisted men .....	.....
Enlisted men (late of the Army).....	.....

Volunteer Service:

Commissioned officers	1
Enlisted men	2
Company attached to the Army	1
Employees of the United States Soldiers' Home	5
Military soldiers	3
Employees of the Quartermaster's Department, U. S. Army	1
Employees of the Subsistence Department, U. S. Army	1
Total	57

OFFICERS ON DUTY AT REMOTE POINTS.

The great inconvenience to officers at distant stations, resulting in the idleness, and in some cases the impossibility, of procuring assistance in supplying their personal wants and the care of their property, seems to demand that section 1232 of the Revised Statutes should be somewhat modified, so that officers at remote posts where private help cannot be secured may be authorized, with, in every case, the consent of the soldier himself, to secure the services of an enlisted man for the performance of those duties. The entire time and attention of officers serving with troops is required in looking after the comfort and wants of their commands and the care of government property and interests. Even if the performance of these domestic duties were suited to their positions, they could only do so by neglecting some of the important and responsible public duties so absolutely essential to the well being and efficiency of their respective commands and the best interests of the service and government.

Instances could be cited of officers who, rather than violate the section named, have conscientiously abstained from the employment of enlisted men in preparing their food or caring for their animals, and have themselves performed these duties. It is not believed that Congress contemplated such a condition of affairs, and I sincerely hope an effort will be made looking to the repeal of that section, or, preferably, to its modification, so that, in such cases, and conditional on the consent of the soldier and the approval of the department commander, officers may be allowed the services of an enlisted man of their immediate command, the pay proper of the soldier being withheld by the government and paid by the officer benefitted.

ALLOWANCES TO OFFICERS ON COURTS-MARTIAL AND MILITARY BOARDS.

Many cases have come to my knowledge of the hardships resulting from the detail of officers for duty on important courts-martial or military boards convened at points away from the proper stations of such officers, and I beg to invite your earnest attention to this matter. Selected by reason of eminent fitness for the special duty to which assigned, they have no control over the length of the period of time during which the court martial or board must remain in session to complete its labors, and, under section 1269 of the Revised Statutes, forbidding any allowance being made to an officer in addition to his pay, the increased expenses incident to their stay in cities fall so heavily upon them in the discharge of imposed duty that, it seems to me, the action of Congress reviving, in such cases, the old *per diem* allowance would be a simple act of justice. That, however, there may be proper restriction and avoidance of abuse, I beg to suggest the decision, in each case, be left absolutely to the discretion of the honorable the Secretary of War.

RETIRED LIST.

The large increase in the number of officers eligible to retirement by reason of having reached the age of sixty-two renders, or should render, inoperative so much of section 1243 of the Revised Statutes as provided for retirement after thirty years' service, and I earnestly recommend that the provision of the section printed in *italics* be repealed.

SEC. 1243. When an officer has served forty consecutive years as a commissioned officer, he shall, if he makes application therefor to the President, be retired from active service and placed upon the retired list. *When an officer has been thirty years in service, he may, upon his own application, in the discretion of the President, be so retired and placed on the retired list.*

The very liberal provisions made for the support of those officers who, by reason of old age and its attendant decrepitude, or in consequence of injuries received in service, are incapacitated for further active duty, would seem to make it obligatory on every officer in the service to sedulously guard the retired list from having placed upon it an unworthy person. Unfortunately, this has not always been the case, and I beg to recommend, as a further guard, that a law be enacted that no officer of the Army be placed on the list of retired officers against whom charges are pending, or who is awaiting the promulgation of the sentence of a court-martial convened for his trial, and providing against the admission on that list of officers who, disabled temporarily from active life in the field by physical ailments not resulting from long service or wounds received in action, have become permanent pensioners of the government, although in many instances they have sufficiently recovered to enable them to secure and fill positions in civil life demanding possibly, as much physical exertion as is required for the performance of ordinary Army duty.

CODIFIED ARMY REGULATIONS.

The last edition of the Army Regulations was issued in 1863, and has been out of print for several years. With slight modifications, and an appendix containing the laws enacted during the two preceding years, it is simply a republication of the Army Regulations of August 10, 1861. An imperative need was felt for a new code which would embrace the numerous orders, decisions, &c., promulgated since 1863, and on my distinguished predecessor was imposed the task of preparing and codifying the Regulations, in addition to the important duties of his position. On the completion of his labors the Codified Regulations were submitted to a board of officers of large and varied experience and high rank. Finally, the work was approved by the honorable the Secretary of War, February 17, 1881, after which it was placed in the hands of the Government Printer. It will make a volume of some 1,400 pages, embracing not only the Regulations, but also the numerous blank forms in use in the several bureaus of the War Department and by the Army at large. The bulky volume, however, is unsuited for ready reference by officers away from their proper stations, on leave or traveling under orders, and with the approval of your predecessor, I caused an abridged edition to be prepared with great care, from which the blank forms are excluded, together with such paragraphs of the Code of Regulations as refer exclusively to the routine internal administration of permanent posts, care of national cemeteries, post schools, post gardens, clerks, and messengers at department headquarters, &c. This abridged edition will, I trust, be found to be a complete *vade mecum* of professional information.

Officers can conveniently carry with them, at home and abroad, for purpose of information and reference.

Confidently expected that the Codified Regulations, in both forms, will issue from the government press and satisfy a need severely felt in many years past.

ILLUSTRATED ARMY REGISTER.

Some time ago it was thought desirable to attempt, in connection with the publication of the official reports of the late war, a collection of approved photographs of all the general officers named by the President of the United States during the eventful years 1861-'65, including all officers who, although never commissioned general officers, had actually commanded a brigade or division in the field; and a circular, setting forth the end in view, was addressed to all officers of that class whose address could be ascertained.

Answers, accompanied by a photograph of cabinet size, have been received from many of the men who, in the dark days of the Republic, responded to the call of duty and whose rank entitled them to those honors. Up to the present time some five hundred photographs have been received and preserved in temporary albums pending final arrangement. A full but concise "*etat de service*" has been prepared for each case, and adds interest to the collection of the leaders in the great contest for the supremacy of the Union. I beg to call attention to this most interesting collection, and earnestly request authority may be granted for the reproduction of the portraits obtained, either by the highly artistic ability of the Government Bureau of Engraving and Printing, or in any other manner that may be selected by the War Department.

MILITARY RESERVATIONS.

An important work (inaugurated a few years since, and steadily prosecuted without interfering with the duties of the office) has been the gathering of data upon which to base complete histories of the military posts (whether abandoned or still garrisoned), giving location, date of establishment and occupation, plat of the site, from whom title to the land was obtained (either by purchase or reservation of public land), cession of State jurisdiction, &c. The prosecution of this work has required much intelligent labor and research, necessitating the consultation of the records of other bureaus of the government, and the result of the end in view is necessarily a slow process.

When completed will be a valuable one, not only to the War Department of the government, but also to the historical knowledge of the country, and, in order that it may be properly conducted as soon as at as early a day as practicable, I recommend that Congress be asked for authority to employ a competent clerk, at a salary of \$1,000 per annum.

CLERICAL DUTY IN THE ARMY.

In the absence of legislative authority for the employment of civilians at the headquarters of the several military divisions and departments, the absolute necessity for clerical services has led to the detail of men from the Army or enlisted in the general service for that special duty, enabling these men to maintain themselves decently and comfortably in the cities or forts where the several headquarters are established,

they have been allowed extra-duty pay and a special rate of commutation of rations, quarters, and fuel, determined, from time to time, by the Secretary of War.

The present number of enlisted men on clerical duty at the several division and department headquarters is as follows:

Headquarters.	Grades.				Total number.	Number allowed commutation of rations at \$1 per day.	Number allowed commutation of rations at 75 cts. per day.	Rate of commutation of quarters per month for all.	Rate of commutation of fuel per month for all.	Extra pay per day for all.
	Sergeants.	Corporals.	Privates.	Topographical assistants.						
Military Division of the Atlantic and Department of the East	1	2	10	...	13	1	12	\$21 00	9 00	35
Department of the South	1	2	7	...	10	...	10	21 00	9 00	35
Department of West Point	1	1	6	...	8	...	8	21 00	9 00	35
Military Division of the Missouri	1	2	9	2	14	3	12	21 00	9 00	35
Department of the Missouri	1	2	9	2	13	...	13	21 00	9 00	35
Department of Dakota	1	2	9	2	14	...	14	21 00	9 00	35
Department of the Platte	1	2	8	2	13	...	13	21 00	9 00	35
Department of Texas	1	2	8	2	13	...	13	21 00	9 00	35
District of New Mexico	1	...	7	...	8	...	8	21 00	9 00	35
District of Montana .....	...	...	1	...	1	...	1	21 00	9 00	35
Military Division of the Pacific and Department of California	1	2	11	2	16	1	15	21 00	9 00	35
Department of the Columbia	1	2	8	2	13	...	13	21 00	9 00	35
Department of Arizona	1	2	8	2	13	...	13	21 00	9 00	35
General recruiting service, New York City	1	...	4	...	5	1	4	21 00	9 00	35
General mounted recruiting service, Jefferson Barracks, Mo. ....	...	...	3	...	3	...	3	21 00	9 00	35
	13	21	107	16	157	5	152			

The total cost of this enlisted clerical force, omitting the ten hospital stewards, is, including estimated additional pay allowed by law for continuous service in the Army, \$151,538.30.

These men are soldiers in name but clerks in fact, and should be styled and paid as clerks. I therefore recommend the abolition of the class known as "general-service clerks," and the substitution thereof of civil employes, in grade and number as indicated below:

Three clerks of Class IV (\$1,800).

Seven clerks of Class III (\$1,600).

Sixteen clerks of Class II (\$1,400).

Thirty-one clerks of Class I (\$1,200).

Fifty-six clerks at \$1,000 per annum.

A total force of one hundred and thirteen clerks, at an aggregate compensation of \$132,200.

The advantages resulting from the proposed change are threefold:

1st. An actual saving of \$19,338.30.

2d. The benefit to the Army growing out of the restoration to its ranks for active service of one hundred and forty-seven men, or a battalion of nearly four companies.

3d. Greater efficiency in the performance of the clerical work.

The ten hospital stewards or apothecaries now on duty in the offices of the chief medical officers of the several military commands are not disturbed by the proposed arrangement, their services being more professional than clerical.

WORKING OF THE OFFICE.

The present compensation of the clerical and other force of this office is as follows:

No.	Designation.	Grade.	Employed under—
1	Civilian clerks.....	Chief clerk	Act of March 3, 1881.
11	do	Class IV.....	Do.
17	do	Class III	Do.
35	do	Class II	Do.
151	do	Class I	Do.
*30	do	do	Do.
6	do	At \$1,000	Do.
*25	do	do	Do.
9	Civilian assistant messengers.....	.....	Do.
30	General-service clerks	Sergeants.....	Act of March 3, 1875.
37	do	Privates	Do.
38	General-service messengers	do	Do.
22	General-service watchmen	do	Do.
†11	General-service clerks	do	Act of March 3, 1881.
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*Additional, to expedite reports upon pension cases.
†Under the law allowing thirty additional men to the bureau of the War Department.

This force (excepting the watchmen) is distributed among the several branches of the office, and with the exception that a new branch has been created for the purposes explained here below, the general business of the old branches and of the unattached divisions remains as summarized in my report of last year.

The rapidly increasing number of calls from the Pension Office for information from the rolls of the Army in connection with claims for pension led to the formation of a new branch in this office last April designated as the "Enlisted Volunteer Pension Branch." This branch, composed of the Volunteer Rolls, Prisoners of War, Death and Disability, and Discontinued Commands Divisions, has devoted its energies exclusively to the prompt rendition of reports on pension claims. The benefits expected have, in the main, been very satisfactory.

By the act of March 3, 1881, twenty-five additional clerks of the lowest class, viz, at an annual salary of \$1,000, were authorized to be employed in this office, but their want of acquaintance with the minutiae of Army rolls and records, and the consequent necessity devolving on the older clerks to devote much time to their instruction, has necessarily prevented the attainment of the highest results. The following table, however, is a gratifying exhibit of the labors of this branch and of other divisions of the office engaged in business relating to claims for pension, bounty, homestead grants, &c.:

Statement of calls from the Commissioner of Pensions, Second Auditor, &c., for full or partial histories of officers and men of the late volunteer forces, in connection with claims for pension, bounty, back pay, subsistence, land claims, lost horses, &c.

	On hand Octo-ber 1, 1880.	Received dur-ing year.	Total.	Finished dur-ing year.	On hand Octo-ber 1, 1881.
COMMISSIONER OF PENSIONS.					
Enlisted volunteer pension branch.....	22, 374	106, 092	128, 466	111, 163	17, 303
Colored troops division.....	85	4, 595	4, 680	4, 560	120
Volunteer service branch (officers' claims)	176	19, 165	19, 341	19, 285	56
Total.....	22, 635	129, 852	152, 487	135, 008	17, 479

they have been allowed extra-duty pay and a special rate of commutation of rations, quarters, and fuel, determined, from time to time, by Secretary of War.

The present number of enlisted men on clerical duty at the several divisions and department headquarters is as follows:

Headquarters.	Grades				Total number	Number allowed commutation of rations at \$1 per day	Number allowed commutation of rations at 75 cts. per day	Rate of commutation of quarters per month for all	Rate of commutation of fuel per month for all
	Sergeants	Corporals	Privates	Topographical assistants					
Military Division of the Atlantic and Department of the East	1	2	10		13	1	12	\$21.00	\$9.00
Department of the South	1	2	7		10		10	21.00	9.00
Department of West Point	1	1	6		8		8	21.00	9.00
Military Division of the Missouri	1	2	9	2	14	2	12	21.00	9.00
Department of the Missouri	1	2	8		11		11	21.00	9.00
Department of Dakota	1	2	9	2	14		14	21.00	9.00
Department of the Platte	1	2	8		11		11	21.00	9.00
Department of Texas	1	2	8		11		11	21.00	9.00
District of New Mexico	1		7		8		8	21.00	9.00
District of Montana			1		1		1	21.00	9.00
Military Division of the Pacific and Department of California	1	2	11	2	16	1	15	21.00	9.00
Department of the Columbia	1	2	8	2	13		13	21.00	9.00
Department of Arizona	1	2	8	2	13		13	21.00	9.00
General recruiting service, New York City	1		4		5	1	4	21.00	9.00
General mounted recruiting service, Jefferson Barracks, Mo.				1	1		1	21.00	9.00
	13	21	107	16	157	4	152		

The total cost of this enlisted clerical force, omitting the ten hospital stewards, is, including estimated additional pay allowed by law for continuous service in the Army, \$151,538.30.

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1st. An actual saving of \$19,338.30.

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3d. Greater efficiency in the performance of the clerical work.

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WORKING OF THE OFFICE.

The present compensation of the clerical and other force of this office is as follows:

No.	Designation	Grade	Employed under—
1	Clerical clerks	Chief clerk	Act of March 3, 1881
11	do	Class IV	Do
17	do	Class III	Do
27	do	Class II	Do
51	do	Class I	Do
40	do	do	Do
5	do	At \$1,000	Do
25	do	do	Do
9	Civilian assistant messengers		Do
20	General service clerks	Sergeants	Act of March 3, 1875
7	do	Privates	Do
2	General service messengers	do	Do
2	General service watchmen	do	Do
11	General service clerks	do	Act of March 3, 1881

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Additional to expedite reports upon pension cases

Under the law allowing thirty additional men to the bureau of the War Department

This force (excepting the watchmen) is distributed among the several branches of the office, and with the exception that a new branch has been created for the purposes explained here below, the general business of the old branches and of the unattached divisions remains as summarized in my report of last year.

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By the act of March 3, 1881, twenty five additional clerks of the lowest class, viz. at an annual salary of \$1,000, were authorized to be employed in this office, but their want of acquaintance with the minutiae of Army rolls and records, and the consequent necessity devolving on the older clerks to devote much time to their instruction, has necessarily prevented the attainment of the highest results. The following table, however, is a gratifying exhibit of the labors of this branch and of other divisions of the office engaged in business relating to claims for pension, bounty, homestead grants, &c.:

Statement of calls from the Commissioner of Pensions, Second Auditor, &c., for full or partial histories of officers and men of the late volunteer forces, in connection with claims for pension, bounty, back pay, subsistence, land claims, lost horses, &c.

	On hand October 1, 1880	Received during year	Total	Finished during year	On hand October 1, 1881.
COMMISSIONER OF PENSIONS.					
Enlisted volunteer pension branch	22,374	106,032	128,406	111,183	17,303
Enlisted troops division	85	4,535	4,620	4,540	120
Volunteer service branch (officers' claims)	176	19,185	19,361	19,245	56
Total	22,635	129,752	152,387	135,008	17,479

Statement of calls from the Commissioner of Pensions, Second Auditor, &c.—Continued

	On hand Octo- ber 1, 1880	Received dur- ing year	Total.	Finished dur- ing year	On hand Octo- ber 1, 1881
SECOND AUDITOR.					
Enlisted volunteer pension branch.	8,304	9,050	17,354	10,054	7,300
Colored troops division	187	3,302	3,489	3,304	185
Volunteer service branch	23	948	971	924	47
Total	8,514	13,300	21,814	14,382	7,432
THIRD AUDITOR.					
Volunteer service branch	19	359	378	373	5
GENERAL LAND OFFICE.					
Volunteer pension branch	773	2,998	3,771	2,088	1,683
Colored troops division		49	49	46	3
Total	773	3,047	3,820	2,134	1,686
SUBSISTENCE DEPARTMENT.					
Volunteer pension branch	56	2,446	2,502	1,043	1,459
Colored troops division		11	11	8	3
Total	56	2,457	2,513	1,051	1,462
PAY DEPARTMENT.					
Colored troops division		1,434	1,434	1,434	

RECAPITULATION

Number of calls (from all sources)				
On hand October 1, 1880 ..			31,997	
Received during the year			150,449	
Finished during the year				182,446
Remaining on hand October 1, 1881				154,990

One of the greatest if not the only obstacle to the development of the full effective working capacity of the office is undoubtedly—though beyond any remedial measures in my power—the scattered condition of the clerical force. Besides the portion of the new State, War, and Navy Department temporarily occupied by consent of the Navy Department, nine detached buildings are rented for the accommodation of the clerks, not including part of the first and the entire third floor of the old Navy building and four rooms in the Winder building. None of the houses rented were, of course, built with a view to the needs of their present occupancy, and it is, perhaps, needless to add that a proper grouping of the several divisions of the office with regard to the degree of intimacy of their relations with one another is an impossibility.

Notwithstanding this serious impediment to the simplification of business, and avoidance of vexatious though unavoidable delay in communicating with distant divisions, it affords me sincere pleasure to state that the business of the office during the past year has been discharged satisfactorily, and to bear testimony to the general efficiency and faithfulness of the clerks.

I feel it my duty—under a keen sense of the manifest, though un-

ated, discrimination against this office in the present organization classification—to invite your attention to the following remarks on the subject, which I had the honor, in December last, of submitting to my predecessor:

Here, on this subject, to invite your attention to the peculiar organization of this office. The clerical force total is 329, made up of 251 civilians and 78 general-service clerks. This latter class of employes grew out of the exigencies of the war, but is at present a nondescript graft on the civil list. By the act of July 27, 1861 (12 Stats., ch. 277), the Adjutant-General was authorized to employ in his office not exceeding ten non-commissioned officers, to be detailed by him from the Army, in addition to his present clerical force. This authority, twice given subsequently, January and July 5, 1862, originated what has since been known as the general-service clerical force of this office. Under authority of the Secretary of War this force was increased from time to time to meet the pressing demands of the service. During the year of the war this force exceeded 400 men.

By the reorganization act of June 30, 1874, the clerical force of the Adjutant-General's Office was changed from a total of 420 (416 civilian and 304 general-service) to 151 clerks, with authority to retain for one year such additional force as might be actually necessary. Under this law, 145 general-service clerks were discharged to positions on the civil list, 5 were transferred to the headquarters of the Army, and again the rolls July 31, 1874, 151 general-service clerks.

This number was further reduced, by the act of March 3, 1875, to 67 general-service clerks, which number, increased 11 by the Secretary of War, under the law of March 3, 1875, makes 78 general-service clerks at present employed in this office. Most of these men are excellent clerks, and, although having seen service in the regular or volunteer forces of the country during the late war, are in no sense soldiers now, but the maintenance of the system burdens the rolls of the Army with men who, through the formality of enlistment, have no place thereon.

In close connection with this whole subject, I beg your earnest scrutiny of the accompanying statement of organization of the bureaus of the several executive departments.

From an examination of this statement and of the rate of percentage of the great classes of clerks, it will be at once perceived that a marked discrimination exists against this office, and which, it is suggested, is not warranted either by the nature of the work performed or the clerical ability of the employes of the Adjutant-General's Office. While the percentage of the clerks of the fourth class will not appear extravagant, a fair comparison cannot be instituted without taking into consideration the number of clerks who receive a higher salary than \$1,800 per annum. Thus the Internal Revenue Bureau of the Treasury Department, with a total clerical force of 1,448, have (including specialists, such as cashiers, tellers, &c.) 2 clerkships, at \$2,700; 4, at \$2,250; 1, at \$2,100; 20, at \$2,000; 12, at \$1,800; and 35, at \$1,600; while the bureau of the War Department, with a total of 700 clerks, or more than one half the Treasury Department, have but 7 clerkships (chief clerks) at \$2,000.

The bureaus of the Interior Department, with a total force of 833 (slightly greater than that of the War Department), have 1 clerkship at \$2,250, and 9 at \$2,000; and, finally, the bureaus of the Post Office Department, with an aggregate force of only 1,000, have 2 clerkships at \$2,250, and 7 at \$2,000.

It will be seen from the above how great is the discrimination, unintentional, perhaps, against this office in the clerical organization. This discrimination is the more apparent from the fact, susceptible of proof, that many clerks from this and other bureaus of the War Department, discouraged at the small salaries received by them, and the unenviable prospect of advancement, owing solely to the small number of higher clerkships allotted, have resigned, and their services eagerly accepted in the other departments of the government, and the value of the training they had received while in this office has been fully acknowledged in the most practical manner; that is, by rapid advancement.

In this office, over 80 per cent. of the clerical force received only \$1,200, or less, per annum.

By the act of March 3, 1875 (18 Stats., ch. 130, p. 397), the chief clerks of the office and several Comptrollers and Auditors were made deputy comptrollers and deputy auditors respectively, and their salaries fixed at \$2,250 per annum.

Coming to the composition of the office of the Second Auditor, the duties of which office can best, by reason of homogeneity, be compared with those performed by those who have the force of this office, we should have, say 2 clerks, at \$2,250; 11, at \$2,000; 20, at \$1,800; 12, at \$1,600; 144, at \$1,400, &c.

In full consideration of the entire question, I earnestly recommend:

That the class of clerks known as "general service" be abolished, and that the present clerical force of this office be established by law on the following scale: 1 chief clerk, at \$2,250; 7 chiefs of division, at \$2,000; 15 clerks of class 4, at \$1,800; 25 clerks of class 3, at \$1,600; 100 clerks of class 2, at \$1,400; 125 clerks of class 1, at \$1,200; and 57 clerks, at \$1,000.

Comparative statement of organization of the clerical force of the several Executive Departments.

Departments and bureaus	Percentage of clerks of the following classes.					
	Total	IV	III	II	I	
TREASURY.						
Superintendent Architect	1	...	22	2	33.3	
First Comptroller	1	...	20.8	8	14.5	
Second Comptroller	1	...	19	20.6	10	
Commissioner of Customs	1	...	12.9	31.6	29	
First Auditor	1	...	16.5	18.2	29	
Second Auditor	1	...	12.9	40.8	23.8	
Third Auditor	1	...	11.1	39.5	29.8	
Fourth Auditor	1	...	31.1	16.6	20	
Fifth Auditor	1	...	20.4	16	24	
Auditor for Post Office Department	1	...	10.2	31.5	20.5	
Treasurer	1	...	10.2	0	13.8	
Redemption Bureau	1	...	10.2	8	40	
Register	1	...	12.1	10.7	14.2	
Comptroller of Currency	1	...	17.9	11.9	11.9	
Light House Board	1	...	25	12.5	12.5	
Bureau of Statist	1	...	17.8	17.2	20.6	
Bureau of Printing	1	...	15.3	6.6	30.7	
Life Saving Service	1	...	16.6	8.2	25	
Commissioner of Internal Revenue	1	...	14.6	20.3	11.8	
WAR.						
Adjutant General	1	3.3	5.1	10.6	56	
Inspector General	1	10.6	10.6	...	10.6	
Major General	1	...	...	...	...
Quartermaster General	1	7.2	8.1	21.8	43.6	
Chief of Staff General	1	3.8	11.5	15.3	18.4	
Surgeon General	1	1.8	2.8	4.3	31.4	
Ordnance	1	2.0	5.7	5.7	17.6	
Paymaster General	1	15.7	15.7	31.5	23.6	
Engineers	1	28.0	14.2	21.4	21.4	



REPORT OF THE JUDGE-ADVOCATE-GENERAL.

WAR DEPARTMENT,
BUREAU OF MILITARY JUSTICE,
October 1, 1881.

SIR: In compliance with Circular of September 16, 1881, I have the honor to furnish the following report of the business of this bureau for the year between October 1, 1880, and October 1, 1881:

Number of general court-martial records received, reviewed, and registered ..	1,792
Number of reports made and opinions furnished upon court-martial proceedings, applications for remission of sentence, &c., and upon miscellaneous questions of law referred to the Judge Advocate-General for opinion by the Secretary of War	402
Number of official applications from the War and Treasury Departments and Pension Office for abstracts of proceedings of trials, &c., answered	336
Copies of Records furnished under the 11th Article of War, &c., pages ...	11,452

The number of records of trials of enlisted men by inferior courts-martial received and filed at the different military departments during the past year, as appears from reports of Judge-Advocates received, is as follows:

Department of Arkansas	46
Department of California ..	819
Department of the Columbia	1,002
Department of Dakota	1,185
Department of the East	1,264
Department of the Missouri ..	1,370
Department of the Platte	1,435
Department of the South	246
Department of Texas	1,089
Total	8,500

No report has been received from the Department of Arizona, and the number tried by inferior courts-martial in that Department is not embraced in the foregoing figures.

By Section 1199 of the Revised Statutes of the United States (as amended by the Act of June 23, 1874, Sec. 2, 18 Stat., 244, it is made the duty of the Judge Advocate General "to receive, revise, and cause to be recorded the proceedings of all courts-martial, courts of inquiry, and military commissions, and to perform such other duties as have been performed by the Judge Advocate General of the Army.

By the subsequent Act of March 3, 1877, 19 Stat., 310, the proceedings of garrison, regimental, and field officer's courts-martial are retained and filed in the office of the Judge Advocate of the geographical department in which they are held, and do not reach this Bureau unless there is some alleged irregularity in the proceedings, or some question of law, practice,

or procedure arises in the case on which the opinion of this Bureau is required. These courts are known as inferior courts martial; they have no power to try capital cases or commissioned officers, or to inflict a fine exceeding one month's pay, or to imprison for a longer period than a month. The principal court-martial work of this Bureau, then, is confined to general courts martial, being courts of superior and general jurisdiction over military crimes and offenses. In time of peace the courts are generally appointed by the commanders of separate departments, who are empowered to confirm and execute all sentences adjudged by such courts, except sentence of death, or of dismissal of an officer; any sentence respecting a general officer, which are not to be carried into execution until confirmed by the President.

The proceedings of all general courts-martial convened by commanders of separate departments thus to be submitted for the action of the President, as well as the proceedings of all such courts as may be convened by the General of the Army, or by the President of the United States (when the general officer authorized to convene the court in the first instance is the accuser or prosecutor), are transmitted to this Bureau (by the Department Commander who appointed the court, or by the Judge-Advocate of the court appointed by the General of the Army or by the President), when the case is fully reported upon both as to law and the facts, which report, with the proceedings of the court in the case, is then submitted to the Secretary of War for the consideration and action of the President as required by law.

The proceedings of all other general courts martial where the sentence has been acted on by the officer ordering the court, and which have been transmitted to this Bureau for record, are, when necessary, revised and reported upon, and submitted to the Secretary of War.

It is to be remarked in this connection that while the Judge-Advocate General is empowered by the statute above quoted to receive and revise the proceedings of courts martial of the class last referred to, in the performance of which duty, as an official of the War Department, he is necessarily subordinate to the Secretary of War, yet the Secretary has no statutory authority to give effect to reports of revisions in such cases, even if he concurs therein, and to this extent the law is defective.

A Court of Inquiry is a tribunal called into being to examine into and report upon the facts of a transaction, accusation, or imputation against an officer or soldier. Under the provisions of the one hundred and fifteenth Article of War, it may be ordered by the President, or by the Commanding Officer, "upon a demand by the officer or soldier whose conduct is to be inquired of." Its object is to gather information with a view to ulterior proceedings by court-martial, or such action as the Commander who convened the court may deem proper.

A military commission is a tribunal called into being in time of war. It is mentioned in Section 1343 of the Revision as a tribunal for the trial of spies, but its organization and the pleadings, practice, and procedure before it are not prescribed by any statute.

I have thus briefly adverted to the military tribunals as well as to the course of procedure by which their proceedings reach this Office for consideration. Upon this Bureau also devolves the duty of furnishing copies of the records of courts martial to parties entitled to them, as provided by the one hundred and fourteenth Article of War. The extent of this work can be appreciated when it is considered that the records of such cases contain from 6,000 to 8,000 legal cap pages of manuscript, or from a million and a half of words, and of the 1,792 records received during the year each will average, say, 100 pages of legal cap, or 179,200 p

in all. These require to be read, revised, and reported upon, and very many of them to be copied, compared, and furnished, as stated.

It is evident, therefore, that in the quantity as well as in the nature and quality of the work to be performed by this Bureau, not only is an adequate force of clerks required, but in view of the interests involved in court martial proceedings and other subjects confided to this Bureau, a force of clerks possessing in the highest degree both capacity and fidelity is imperatively necessary.

The insufficient clerical force allowed this Bureau has seriously crippled its efficiency, and has necessitated the transfer of officers of the corps of Judge Advocates to duty in this office, thus depriving the geographical Military Departments of their much needed services. The large volume of business transacted and pressing upon this Bureau requires its employes to perform unusually severe and unremitting labor in order to keep up the current business.

This is neither wise nor just. An adequate and efficient clerical force is, for the reasons stated, of the utmost importance. With the view, therefore, of increasing its efficiency and rendering it adequate to the necessities of the public service, and in the interests of economy, there should be allowed:

One chief clerk, at a salary of \$2,000 a year, as provided by section 315 of the Revised Statutes.

Two clerks of class 4.

Two clerks of class 3.

One clerk of class 2.

There should also be allowed one messenger and one laborer to convey theatrical messages and mails, to keep the office in order, and to handle and attend to its property and labor.

I have also to report that the office furniture generally is worn out and rickety, and is unfitted for any public office. The law library is insufficient, incomplete, and antiquated. The reports of Wallace and Otto of the Supreme Court of the United States, the Opinions of the Attorneys General of the United States, and a small number of text books, with a few scattering disconnected volumes of reports, constitute the library of the office.

To supply necessary furniture and books an adequate fund is required and has been estimated for: the sums allowed for several years past being barely sufficient to purchase necessary stationery for the office.

The other duties of the Judge Advocate General, referred to in the statutes, consist in rendering reports upon applications for clemency addressed to the President or Secretary of War by persons serving sentences of military courts, formulating and revising charges and specifications, advising courts martial upon questions of law, practice, procedure and evidence arising before them, examining questions of law, and submitting opinions upon the same in matters arising in the course of the administration of the War Department, when called upon to do so by the Secretary of War, and, in short, when so required, it is the duty of the Judge Advocate General, as the law officer of the War Department, to advise in all questions touching the rights, duties, obligations, and limitations of authority of officers and others employed under the War Department, as fixed, defined, and limited by the Constitution and laws.

THE CORPS OF JUDGE-ADVOCATES.

The officers comprising this corps perform their duties under the direction of the Judge-Advocate-General (Sec. 1201, Revised Statutes), as amended by Act approved June 23, 1874 (18 Stat., 244).

These officers are stationed at the headquarters of the several geographical military departments, and their duties consist in preparing and revising charges, examining and reporting upon the proceedings of all military courts received at the Headquarters of the military departments, at which they are stationed, assisting and advising the Department Commander, when required to do so, in the examination of questions of law arising in the administration of his department, and officiating as Judge Advocates of general courts martial in the trial of important cases; appearing as counsel in behalf of the United States in civil courts, when the Department Commander may deem the same proper and for the best interests of the service.

This corps now consists of seven (7) officers, but is limited, however, by the act of Congress last cited to four (4), by gradual reduction by the casualties of the service). I recommend the repeal of the clause in the statute making this reduction, and the organization of the corps of Judge Advocates upon the same basis as other staff corps of the Army, this being the only corps in which the hope of promotion does not serve as an incentive to duty. The addition of four captains to the corps would render it able to meet all the requirements of the service, and I earnestly recommend that legislation in this behalf be urged by the Honorable Secretary of War. There are now ten geographical Departments, each of which should have a Judge-Advocate to advise in matters of law, but with the present strength of the corps of Judge Advocates, four of these Departments—assuming all the members of the corps to be assigned to such Departments—must necessarily be deprived of the services of Judge Advocates. In view of this fact, and as the addition of four captains would place the corps on a fair numerical basis, the importance of this slight increase becomes manifest, and I earnestly recommend it.

The seven members of the corps of Judge Advocates are on duty as follows: Three are on duty in this Bureau, one in the Office of the Secretary of War, one as Professor of Law at the United States Military Academy, and two are on duty as Judge-Advocates of Departments. The importance of having a competent instructor of law at the Military Academy cannot be overestimated. It certainly requires no argument to make it clear to all that it is indispensable to a proper and intelligent discharge of the varied duties which devolve upon the Army officer that he should be as fully instructed in the general principles of law as possible. In the exercise of military command under this government, which is peculiarly one of laws, and where the increasing population surrounds military stations and military commanders, and where, as a consequence, questions of jurisdiction and of personal and property rights are necessarily constantly arising, it would seem proper that increased facilities should be furnished the young officer for acquiring such knowledge as an essential part of his military education.

I desire here to invite attention to some defects and omissions in our Articles of War.

The sixty-fifth, sixty-sixth, sixty-seventh, sixty-eighth, sixty-ninth, seventieth, and seventy-first Articles, relating to the arrest and confinement of officers and soldiers accused of crimes, duration of confinement, copy of charges and time of trial, being the only provisions of the Articles of War relating to this important portion of the criminal procedure before courts martial, are unjustly discriminating and do not adequately provide for the subjects mentioned. By Article 66 a soldier may be held in confinement, and generally is so held, until his trial, no matter how long that period of time may be. By Article 71 an exact limit of time

fixed in which an officer may be kept in arrest, and if not brought to trial within the time fixed (48 days), the Article declares, "the arrest shall cease." I cannot understand why such a distinction should be made among any classes of persons amenable to military law. According to the practice now obtaining, any officer may prefer charges against another officer or enlisted man. No preliminary examination is required by law to be made into the grounds of accusation (although in some instances Department Commanders require this to be done to a limited extent), which in view of the length of time that elapses in many cases before a court martial can be conveniently appointed for the trial, would seem to demand better regulation.

I desire also to invite attention to the sixty first and sixty second Articles of War, the Articles under which most military prosecutions are conducted. The sixty first Article provides that "Any officer who is convicted of conduct unbecoming an officer and a gentleman shall be dismissed the service." This offense being undefined by any statute, or by the common law, in most prosecutions under it the facts alleged in the specification to the charge have never before passed into a precedent, being entirely novel in character and statement. The court martial therefore in every such case, contrary to the fundamental maxim that "a court declares the law but may not make it" *jus dicere*, but not *judicare*, legislates as to what shall or shall not be deemed criminal under this Article. It rarely happens that the conviction and dismissal of an officer actually guilty of a crime or offence justifying dismissal, is founded alone on this charge, but is usually associated with other charges, which upon conviction justify dismissal, where sentence of dismissal is proper. For this reason, therefore, I would recommend the repeal of the sixty first Article and the enactment of such legislation as may be declared necessary to properly and definitely comprehend all offences which the said Article is intended to embrace.

The sixty second Article reads:

"Crimes not capital, and all disorders and neglects which officers and soldiers may be guilty of, to the prejudice of good order and military discipline, though not mentioned in the foregoing articles of war, are to be taken cognizance of by a general or regimental, garrison or field officers' court-martial, according to the nature and degree of the offence, and punished at the discretion of such court."

This sweeping provision has formed a part of our Articles of War since September 20, 1776, shortly after the Declaration of Independence, when it was adopted by the Continental Congress for the government of the Army, and has been continued through all the subsequent revisions of our Articles of War to the present time.

Like the preceding Article it was taken from the articles of war made by the Crown of England under a clause contained in the Mutiny Act (annually included in that Act since 3 Geo. I.), empowering the Crown to make Articles of War; but whether the making of an Article in this form was a proper exercise of the power conferred, has not, so far as I am informed, received judicial consideration in England, nor has the Article been so considered in this country. While this Article is praised by some military men, it is also condemned by others. An eminent general and statesman termed it "The Devil's Article." Like the preceding one it neither mentions nor specifies any known crime or offence. In many of the prosecutions under it, the facts alleged are without precedent, and do not come within the terms of any statute, or of the common law, giving a court martial jurisdiction to try and punish. The Article, therefore, is construed to deal out unknown punishments for unknown and undefined crimes and offences, *misere est scriptus, ubi jus est*

vagum aut incertum. As a consequence of this uncertainty with respect to this and the preceding Article, one court martial may (and often does) consider actions as "conduct unbecoming an officer and a gentleman," or as "conduct to the prejudice of good order and military discipline," while another court martial on substantially the same state of facts, and from equally conscientious motives, would consider them proper or excusable. The generality of these Articles induces the manufacture of new offences, and the frequency of trials by courts martial, and the operation of the last mentioned Article in connection with other Articles result in the annual court martialing of a large per cent. of the enlisted men of the Army (nearly 50 per cent. the present year), whereby large sums of the pay of the soldiers are regularly lost to them in the shape of fines, forfeitures, and penalties, aggregating about \$150,000 annually, causing great dissatisfaction, discontent, and frequent desertions, and entailing great loss to the service in the matter of property, generally taken at the time of desertion.

The frequency of trials by court martial should be prevented, and the specific crimes and offences contemplated by the Articles of War should be defined and limited, and the jurisdiction of courts martial should be limited accordingly. The practice of imposing forfeitures of comparatively large sums of money by sentence of courts martial, against the pay of enlisted men, is demoralizing in the extreme to the Army. For trifling neglects or disorders, or for what might be considered no more than bad manners, brief absences without leave, &c., fines are often imposed of ten dollars or perhaps the entire month's pay. This effect might be greatly ameliorated if the proceeds of such forfeitures, &c. could be appropriated to such uses as would inure to the direct benefit of those who faithfully performed their duties, by the establishing post libraries, gymnasiums, bath rooms, &c., &c.

So charges are preferred against enlisted men, and until tried by court martial they must remain in confinement without bail or mainprise, and are not ordered released by the officer having authority to confirm the proceedings of the court. It sometimes happens that men are held in confinement for a year awaiting trial, the exigencies of the service not permitting trial sooner, and the trial results in an acquittal, or demonstrates that the offence was alleged to be more serious than the evidence would justify, and that an inferior court martial would have been fully competent to act in the case at once, thus avoiding this long delay and confinement, all of which is the result of there being no preliminary examination into the merits of the case when the charges were preferred, thus bringing the essential facts to the notice of the officer who is authorized to appoint a court for the trial. Of course I here speak of cases deemed to be proper for the consideration of a general court martial. The long delays not unfrequently cause failures of justice, where the witnesses for the prosecution cannot be found, or are induced by the accused to flee the country beyond the reach of process of the court at the time of trial.

The ninety first Article of War provides in certain contingencies for the reading in evidence of the depositions of witnesses before court martial in cases not capital. If these depositions were taken at or near the time when the offence was committed, when practicable to do so directly in the presence of the prisoner, so that he might cross examine the witnesses if he would, and to be used in the trial, in the contingency that the case is not capital, or where it is shown to the satisfaction of the court that the witness is dead, or is so ill as not to be able to travel, or if he is kept out of the way by the accused, or is insane, or is re-

ing beyond the limits of the State, Territory, or District in which the court may be ordered to sit, the administration of military justice would be greatly promoted by amending the law accordingly. The importance of this amendment of the law will be seen when it is considered that the territorial jurisdiction of a court-martial is so extended that a military offence committed in Maine may be brought to trial before a court-martial sitting in Oregon, rendering it difficult if not impossible at times to obtain the *viva voce* testimony of material witnesses.

So in case of arrest or confinement upon charges not felonious or aggravated, if the trial be not ordered within ten days, or other brief period, the commanding officer should be authorized to return the accused to duty until such time as trial may be ordered.

Regulations should be provided on the subject of framing the charges, and presenting them to the court for trial. No uniform practice now obtains on this important subject, and great incongruity of procedure and arring of authority at times result as a consequence. The course now pursued may be briefly stated as follows: Charges are forwarded to the Department Commander recommending their trial. They are then referred to the Department Judge Advocate for opinion. In very many cases this officer finds the specification of facts so defectively stated, or an omission of the *facts*, and statements of the evidence only, in support of the charge, that amendment or revision becomes essentially necessary. In many cases the officer preferring the charges objects to any revision by the Judge-Advocate, and declines to recognize his charges as thus revised, when it is proper in some cases that he should do so.

This matter ought to be set at rest by some authoritative provision empowering the officer authorized to appoint the court to cause the charges in all cases deemed necessary to be amended or revised (before arraignment and plea) by the Judge-Advocate of the Department, and the charges so revised and amended to be authenticated by the Judge-Advocate of the court appointed to try them, and empowering him to further amend them, with the consent of the convening officer, at any time before arraignment and plea, if the facts appear to warrant it.

Where charges are preferred against an officer or enlisted man, deemed proper for trial by general court-martial, it should be made the duty of the Commanding Officer, his Adjutant, or some disinterested officer, as soon as practicable, having regard to the circumstances attending the commission of the alleged crime or offence, to proceed to examine into the nature of such charges, and for this purpose he should have power to compel the attendance of witnesses residing within the limits of the command of the officer authorized to appoint the court. The witnesses should be sworn and examined by such officer, with a right on the part of the prisoner to cross examine; the testimony should be written in the form of a deposition and subscribed by the witness, the accused to be a competent witness in his own behalf in the same manner as before a court martial, and to be permitted to make and subscribe such statement as he may desire. The charges and depositions should then be forwarded to the officer authorized to appoint a court for the trial, who should be required to determine as soon as practicable whether it is proper to bring the case before a general court-martial. If he should not deem the case proper for trial by general court martial, or if he should deem the case of an enlisted man to be a proper one for the cognizance of an inferior court martial, his decision to that effect should be communicated to the commanding officer of the accused. An appeal from such decision, within a reasonable time, should be authorized to the Secretary of War, whose decision should be final.

An able writer on military law says:

No person should be put upon his trial before a general court-martial unless in consequence of a previous report by an inquest, on evidence laid before them that there appears sufficient grounds for calling upon the party to defend himself judicially against the matters of accusation. A preliminary form of this nature would be of finite service in the repression of calumnious and frivolous prosecutions and would tend more than any other measure to the checking of that extreme frequency of trial by court-martial, which has the worst effect upon the public mind, reflecting dishonor on the military character in general, spreading disunion and party divisions among the members of a corps, and frequently laying the foundation of permanent and fatal animosities. (Tyler's Essay on Military Law, pp. 342-3.)

In reviewing court martial proceedings, especially in cases of desertion, the prisoner very often is found to complain of ill treatment at the hands of his superior officers, but more frequently at the hands of non-commissioned officers, and to attribute his desertion to that cause.

This complaint of ill treatment is found repeated and reiterated in hundreds of trials for desertion, and sometimes for other offenses.

Whether the complaint be true or false, the opportunity which is afforded a superior to oppress an inferior is very great, and tends to give credence to the complaint. In the interests of the officer or non-commissioned officer, therefore, if the complaint be false, or in the interests of the soldier and the service if true, some remedy, either by legislation or regulation, should be adopted that would effectually prevent the possibility of an abuse of authority.

It is believed that the possibility of such abuse of power on the part of non-commissioned officers would be remedied if the men of the company were permitted at all proper times to lay all matters of complaint in person before the company commanders, and not as is now the general practice of requiring all complaints to be made through the first sergeant of the company.

The seventy-second Article of War should be amended by expressly authorizing the President of the United States and Colonels commanding separate Departments to appoint general courts martial whenever necessary.

By Article 38 of the rules and articles for the government of the Navy the President may appoint general courts-martial for the Navy whenever necessary.

So in maintaining the discipline of the Army like power should be conferred upon him by the Articles of War. Colonels are sometimes placed in command of separate Departments according to brevet rank of Brigadier or Major General. In view of the fact that there are not a great many colonels who have not the brevet rank of Brigadier or Major General, and that the number having such brevet rank is constantly diminishing, and that colonels may necessarily be called upon now and in the future to command Departments, the seventy-second Article should be amended as indicated, otherwise Colonels in command of Departments not having brevet rank will be unable to properly enforce the discipline of their Departments in view of the restrictions contained in that Article.

The authority conferred upon the Judge-Advocate of a court martial by Section 1202 of the Revised Statutes, "to issue the like process to compel witnesses to appear and testify which courts of criminal jurisdiction within the State, Territory, or District where such military court shall be ordered to sit may lawfully issue," should be penally sanctioned. While the Judge-Advocate may issue the process, there is no statutory authority to punish disobedience thereof. Witnesses not in the military service are now induced to attend solely by reason of a liberal com-

penation much exceeding that paid by any criminal court, whether State or National. As a matter of economy, then, if not of justice, power to punish reluctant and disobedient witnesses should be conferred by statute upon courts-martial or upon the Judge Advocates thereof.

Except as provided in the eighty-fourth and eighty fifth Articles of War, concerning the administration of oaths to the members and judge-advocate of a court martial, no authority whatever is given by any statute to administer an oath before a court martial, nor is it certain that the common law would confer such power. If, therefore, the judge-advocate or some official before a court martial were expressly authorized to administer oaths to witnesses or other persons in trials by court-martial, many doubts and uncertainties in regard to this matter would be settled.

The operation of that portion of the ninetieth Article of War, which requires the Judge Advocate of a court martial to prosecute, as well as to a certain extent to consider himself counsel for the prisoner, tends to mislead. This Article was framed at a time when the person preferring the charges appeared and prosecuted them before the court martial, or if he failed to prosecute, another person other than the judge-advocate was so appointed. As questions were asked through the judge-advocate, he could object to and decline to entertain criminating questions to the accused and witnesses; the party originating the charges and the accused being thus the actual parties before the court, and the judge-advocate being the official or nominal prosecutor. In this country, however, the judge-advocate of a court-martial prosecutes before it in as ample a manner as a United States Attorney prosecutes a criminal case before a Circuit or District Court, and a private prosecutor is not to be heard before a court-martial except in testifying as a witness. The prisoner not being permitted to testify before a court martial till the passage of the Act of March 16, 1878 (20 Stat., 30), making persons charged with crimes and offences competent witnesses, no criminating or other question touching his guilt or innocence could properly be put to him as a witness. It, however, the prisoner now offers himself as a witness under the Act referred to, the understanding is that he becomes a general witness in the case, and must answer relevant questions, even if the answers would tend to criminate him.

Ignorant enlisted men, however, are led to believe that the judge-advocate is required to act as their counsel, when he cannot nor does he do so. Yet, adhering to the belief that he must, the prisoner frequently confides his defence to the judge-advocate, who is thus greatly embarrassed in the trial of the cause by reason of such knowledge. Obtained under such circumstances, a proper sense of honor will prevent its use to the prejudice of the prisoner.

In cases of conviction and sentence, the next thing heard from the prisoner comes in the form of a petition praying for remission or disapproval of his sentence, on the ground that he was deceived or misled by the advice of the Judge-Advocate of the court at the trial. The Judge-Advocates of courts martial, unfortunately, are usually selected by the officers appointing the court (see Article 74) from the youngest and least experienced of the subaltern officers, apparently that they may thus acquire information, rather than that the court should be well advised and every legal right thus be secured to the prisoner.

Extracts from the reports of Judge-Advocates of Departments (or officers acting and performing the duties of those officers), embodying

recommendations on various matters, are hereto appended, and, with this report, are respectfully submitted.

D. G. SWAIM,
Judge-Advocate-General

The Hon. the SECRETARY OF WAR.

Extract from report of Judge-Advocate, Department of the Platte.

The administration of justice in this Department has received the usual attention this office during the past year.

Questions submitted have been examined, and expressions of opinion made, as to law and justice of the matters involved required.

This Military Department extends over a large territory, and includes within its borders great numbers of Indian tribes, who hold portions of it subject to agreements and laws from time to time made and enacted by the national government. To protect them from external causes of demoralization, prevent intertribe wars and bloodshed, as well as secure pioneers in their rights, not unfrequently involves delicate and perplexed questions as to their relative rights and responsibilities.

To insure respect for the law of the land by such tribes and these early settlers requires continuing familiarity with legal enactments, as well as with the objects upon which they are to operate and the subjects to be affected by their administration. To this end laws and decisions should be provided for each Department Headquarters.

The sum heretofore appropriated for libraries at Department Headquarters has become practically available, but it is supposed it soon will, and it is hoped inadequate amounts will be hereafter appropriated to supply a want so plainly required for the best interests of the public and Army service.

The correspondence of this office with officers and others in this Department and beyond its boundaries has continued, and, it is believed, has been instrumental in the settlement of differences and the avoidance of conflicts relating to questions between officials involving the jurisdiction of the courts of the general and State governments.

The attention of this office has been repeatedly called (by grave events occurring within this Department) to the deficiency of adequate authority (in military courts) to punish murder in time of peace. It is believed the security and welfare of individuals and the good of the service demand that this offence (occurring in the Army) should be tried by its courts. As at present provided it practically goes unpunished, and this most atrocious crime is in the military service beyond the reach of proper investigation or trial.

The reasons which operate to render unavoidable military laws and courts for the punishment of other offences apply to this also, and demand such trials.

The malice and cruelty which induces a person in the Army to shed the blood of his comrade, or send to an untimely grave the officer who directs and leads in the hour of danger, is less restrained by the apprehension of punishment in such cases than is the perpetrator of a minor or trivial offense.

In the one speedy and substantial justice is meted out, while in the other the accused is turned over to the local courts of the frontier, sent to a distant place of incarceration, where witnesses can scarcely attend or be procured, and when, at best, the matter will drag slowly on, and can only with extreme difficulty be brought to trial so as either to punish crime or vindicate justice. Legislation upon this subject is believed to be necessary, and respectfully recommended.

The anomalous condition of Judge-Advocates in the matter of promotion has long attracted the attention of officers of the Army; and it is believed that the time has arrived when suitable legislation should provide for them such advancement of rank as is guaranteed to other officers.

The bill reported in Congress last winter seemed to embody the principle applicable to the matter, and its provisions are commended. The present system of military justice has made benign progress, brought order out of chaos, substituted established principles and authoritative decisions for conflicting findings, and made law the basis of government instead of personal dictum.

The usefulness and permanency of the corps, and the efficiency of its humanitarian influences, depends in some degree upon the legislative provision which should assign its officers the rights conceded to all other officers of the Army.

Extract from report of Judge-Advocate, Department of the East and Military Division of the Atlantic

Under the direction of the Honorable Secretary of War, an effort has been made to secure from the Legislature of the State of New York an act granting certain riparian rights to the post and recruiting depot at David's Island, New York Harbor, so as to increase its facilities for landing on the main shore in Westchester.

The matter is still in charge.

By direction of the same authority a writ of error was taken to the United States court sitting for the southern district of New York from the district court, in the case of *Wheeler*, involving the construction of the one hundred and third Article of War in case of a court-martial for argument in November.

The various sentences of the different general courts-martial in the Division, on the subject of furloughs involving discharge and confinement in the military prison, have been sufficiently noticeable in the past year to divide attention to the propriety of a thorough revision of the Articles of War, so that penalties for many offenses may be definite and certain.

During the time covered by this report there have been seventy-six communications (including charges and specifications submitted for examination and revision) received at this office for recommendation and report. These have embraced not only questions for remissions of sentences and ordinary legal questions as to the construction of Articles of War or Regulations, but also questions of exercise of jurisdiction of State authority, as, for example, whether post-traders can be taxed, also whether the Executive authority in an incorporated village can compel the discontinuance of unauthorized rifle practice at a military post within its limits, over which the United States has, however, exclusive jurisdiction.

As to the construction of deeds of cession of a military post where the State reserved certain rights as to the quarrying upon or occupying portions of the same.

Also questions as to the custody of the minor children and property of a deceased soldier at a military post under the exclusive jurisdiction of the United States.

The appropriation recently made by Congress for the purchase of law-books for this office, though very small, will, it is hoped, be continued annually and increased in amount until a working library shall be secured.

The want of books of reference and reports of the superior courts of law has, on several occasions during the past year, prevented me from presenting to the court a full authority, when requested, during an argument.

In conclusion it is to be hoped that, in the approaching session of Congress, the recommendations found in the last message of President Hayes, relative to the corps of Judge-Advocates, may receive early and favorable attention.

Extract from report of acting Judge-Advocate, Department of the Columbia.

From the foregoing exhibit it is seen that 35 cases of desertion were tried in the year ending August 31, 1890, and only 12 in the year ending August 31, 1891. The inference to be drawn showing none would be very gratifying, but the matter assumes a very different aspect when it is known that 101 desertions were reported in the past year and 107 in the previous year. The conclusion is unavoidable that, while the number of desertions per year remains about the same, the facilities for successfully accomplishing the crime have rapidly multiplied, and a much larger number of this class of criminals escape justice now than formerly.

During the seven months that the undersigned has acted as Judge-Advocate of this district he has been detailed as judge-advocate of two important general courts--at Fort Walla Walla, W. T., and the other at Fort Townsend, W. T.

The former court was ordered for the trial of a lieutenant-colonel upon charges preferred by another officer, a captain in the same regiment, and was ordered only after failure of all other attempts at a satisfactory settlement of the matter at issue. After convening of the court, however, and before the arraignment of the accused, an able and happy adjustment of the subject-matter of the charges was arrived at through explanations and concessions on the part of the accused and the officer bringing the charges, which resulted in the withdrawal of the charges by the District Commander. This matter is touched upon here, inasmuch as, the court not having proceeded to the arraignment of the accused, no record of its proceedings was added to the Judge-Advocate-General.

In conclusion, I have the honor to state that the recommendations made and opinions furnished by the undersigned have, without exception, been approved and confirmed by the Department Commander, and, in the only instance in which it was deemed advisable to apply to the Secretary of War for a more authoritative decision, the same delivered by the Department Judge-Advocate was approved and confirmed by the Judge-Advocate-General and Secretary of War.

Extract from report of acting Judge-Advocate, Department of Texas.

It is respectfully submitted that the necessity of detailing a judge-advocate for garrison courts-martial causes frequent embarrassment. At numerous posts the requisite number of officers is not available. In such cases punish-

ment must, of necessity, be arbitrary or long-delayed and expensive. The court was, at best, a formal and unwieldy tribunal for disposing of petty and now, it is confidently believed, the interests of the service den, and a more summary, and certain substitute. For example, if a charge of law could be so as to authorize in time of peace a court after the manner of a field officer, if, for instance, the eighty-second Article of War could be so modified as to permit detail of a garrison court of less than three, when that number is not available, would be an improvement on the present system, which seems unnecessarily formal, circumstantial, and too liable to be beyond the reach of those who most.

Attention is respectfully invited to the vast sums of money derived from the and applied to the Soldiers' Home.

Take this Department. For the past three years the strength of the enlist has averaged 3,419; exclusive of forfeitures of deserters and loss of all pay advances by those dishonorably discharged, the fines imposed upon soldiers remaining in service have alone aggregated \$15,087 a year, on an average, to which adding deduction of 12½ cents a month, it will be seen that \$20,215 has annually been from soldiers still in service in this Department to support an establishment an average of three a year has been admitted. If analogy may be applied whole Army, \$147,813 is annually taken from soldiers remaining in service to the home, to which few ever get.

If the purport of the law be the benefit of the soldier who serves the government faithfully, it would seem but just and wise to apply a part of this money to meet actual needs. Could a portion of fines be set apart for the use of the soldier at the post where imposed, they might enjoy decent quarters, and a better condition, without expense to the government. The soldier would then be enabled to receive benefit of part of the money taken from him, and the service would be bettered by the improvement in the condition of its soldiers. The good soldier who does the work of the delinquent would in return enjoy the benefits of the fines on the latter.

As it now stands, enormous sums of money are deducted from the small pay of the enlisted man and applied to the maintenance of a magnificent establishment, comparatively few indeed may ever hope to enjoy.

As has been previously reported, the necessity of suitable books of law in the field is felt, and it is hoped a successful effort will be made to secure an appropriation of the few dollars required.

Extract from report of acting Judge-Advocate, Military Division of the Pacific and Department of California.

No commissioned officers have been tried in this Department during the year. Charges against one were received, but on investigation dismissed.

There is an apparent improvement in discipline indicated by this report, compared with that of September 24, 1880.

The number of charges for trial by general court-martial received during the year is 41 less than during the previous year, and the number of cases tried by general, garrison, and regimental courts-martial is 125 less, while the number of cases has remained the same.

Extract from report of Lieutenant Groesbeck, Sixth Infantry, in charge of Judge-Advocate's office, Department of the Missouri.

The following table was compiled mainly from cases of enlisted men convicted of desertion and now undergoing sentence in the military prison at Fort Leavenworth.

DESERPTIONS.

Before serving one year.....	.....
After serving one year.....	.....
After serving two years.....	.....
After serving three years.....	.....
After serving four years.....	.....

A tabulated statement of all the desertions in the Army during the past year doubtless show a result much like the above, and from which it can be confidently inferred that, whatever corrective is sought to be applied to the tendency to desertion, must have special regard to the needs of the recruit and of the young soldier during twelve and eighteen months' service. Excepting a small class of vicious characters, who always have been, and probably always will be, "run out" by the companies and organizations to which they are assigned, my impression is that nearly all the

now accepted could be induced to remain until they become seasoned to the hard duties of the service, and the danger of desertion thus largely eliminated. Among the causes that are now most baneful, and which ought to be assailed vigorously until corrected, is the brutality of non-commissioned officers. The American recruit is sensitive to restraint, feels any indignity keenly, broods over his sense of wrong and spreads a general feeling of discontent that influences hurtfully the foreign element in ranks of the Army, which, owing to early habits and usages, would more readily submit to the methods of discipline employed. The crying need, then, is a system of instruction for non-commissioned officers, which shall enjoin, not only unflinching firmness in the exercise of their very responsible duties, but absolute forbearance in the use of profane and often disgustingly abusive language now too often accompanying their authoritative acts and commands. This is an old abuse, and its correction will not only make better non-commissioned officers, but maintain a more wholesome discipline and lessen the number of crimes.

A second and perhaps greater cause of desertion is found in the lack of effort put forth to arrest the deserter, and especially in the insufficiency of the reward offered for his apprehension and delivery, which ought to include cost of transportation of the prisoner to the "nearest military post," reckoned by mileage at 8 or 10 cents per mile. Many a deserter now feels comparatively safe because the sheriff could not "make it pay" to apprehend and undertake his delivery.

A third cause rests in the fact of the punishment imposed not being sufficiently deterrent. It has become a common remark among discontented men that two years' confinement in the military prison is not so great a hardship as five years of taxing one's strength in garrison and field, where fatigue labor is the principal occupation. I am satisfied that many men desert with a view to accepting the alternative of conviction and sentence to hard labor for two years, and then be set at liberty, rather than face the certainty of four or five years of service which has become distasteful to them. Courts should be encouraged to impose at least three years confinement for desertion, and the labor at the prison should be sufficiently severe to contrast unfavorably with the ordinary labor of garrison life.

Extract from report of acting Judge-Advocate, Department of Dakota.

Attention is invited to the lack of uniformity in the practice before general courts-martial in respect to obtaining testimony by deposition under the provisions of the Twenty-first Article of War. From the records of this office it would seem that a wide diversity exists in the opinions of officers as to the nature and form of the "deposition" and the formalities necessary to be observed, in order that it may be safely received as evidence by the court. In some instances, these depositions are offered in the form of an affidavit. In many they are unaccompanied by proof of "reasonable notice," while in other cases, copies of interrogatories and cross-interrogatories are exchanged between the parties, and occasionally application is made to the court to issue a "*dedimus potestatem*."

It is also apparently, an unsettled question in what manner the expenses of such an examination are to be paid. The disbursement has been made in this department by the Quartermaster's Department, but at times with hesitation.

It is respectfully recommended that some mode of procedure be authoritatively adopted and promulgated.



REPORT OF THE QUARTERMASTER-GENERAL.



REPORT OF THE QUARTERMASTER-GENERAL.

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE,
Washington, D. C., November 1, 1881.

SIR: I have the honor to transmit herewith, for the honorable the Secretary of War, the report of operations of the Quartermaster's Department during the fiscal year ending June 30, 1881.

A synopsis of the report was forwarded to the War Department on the 26th ultimo.

Very respectfully, your obedient servant,

M. C. MEIGS.

Quartermaster General, Bvt. Major General, U. S. A.

To the ADJUTANT GENERAL OF THE ARMY.

[First indorsement.]

ADJUTANT GENERAL'S OFFICE,
Washington, November 2, 1881.

Respectfully submitted to the Secretary of War.

R. C. DRUM.

Adjutant General.

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE,
Washington, October 21, 1881.

SIR: I have the honor to submit the annual report of operations of the Quartermaster's Department during the fiscal year ending June 30, 1881.

The balance at end of June 30, 1880, in Treasury to credit of the Quartermaster's Department was, as by last report	\$1,027,845 68
The appropriations made for the service of the Quartermaster's Department during the fiscal year were, in gross	11,498,758 19
The appropriations for deficiency for 1880 and prior years	215,466 41
Appropriations for 50 per centum to land-grant railroads	575,000 00
Amounts deposited to credit of appropriations and received from sales to others of public property	541,147 29
Total	13,857,187 57
Remittances to disbursing officers have amounted to ..	\$11,201,526 63
Requests to pay settlements made by the Treasury ..	718,295 13
Carried to surplus fund, act 30th June 1874 ..	230,123 62
Error in credit to clothing appropriation, 1879, now dropped ..	26 75
.....	12,151,891 53
Balance in Treasury undrawn at end of June 30, 1881	1,705,296 04

A table accompanying this report gives the amount of the various items of appropriations, remittances, &c., in detail.

The Quartermaster's Department is charged with the duty of providing the means of transportation by land and water for all troops and all material of war. It furnishes the horses of the artillery and cavalry, and horses and mules for the trains. It provides and distributes clothing, tents, camp and garrison equipage, forage, lumber, and all material for camps and for shelter of troops and stores. It now provides light for all military posts and buildings. It builds barracks, storehouses, hospitals; provides wagons and ambulances and harness, except for cavalry and artillery horses; builds or chartered ships, steamers, and boats, docks, and wharves; constructs and repairs roads, railways, and bridges; clears out obstructions in rivers and harbors when necessary for military purposes; provides, by hire or purchase, grounds for military encampments and buildings; pays generally all expenses of military operations not by law assigned to some other department; and, finally, it provides and maintains military cemeteries in which the dead of the Army are buried.

Food, arms, ammunition, medical and hospital stores are purchased and issued by other departments, but the Quartermaster's Department transports them to the place of issue, and provides storehouses for their preservation until consumed.

About three hundred officers of the line, in each fiscal year, are placed on duty as acting assistant quartermasters, and are charged with the responsibility for public property, and many of them with the disbursement of public funds. A list of those to whom money has been remitted or who have acted as assistant quartermasters during the fiscal year, is with this report.

For the responsibility thus involved, and the labor attending their duties, it seems to be just that they should be allowed by the Government the same moderate monthly compensation which is allowed to acting commissaries of subsistence for duties somewhat similar, viz. \$30 per month.

The want of post quartermaster sergeants still continues to be felt, and I am requested by officers who have the good of the service at heart to again recommend that their appointment be provided for.

The acting assistant quartermaster who is in charge of the military property of the Quartermaster's Department at any military post, as a rule, leaves the post whenever the garrison is exchanged or removed, and the sudden transfer of property, often of great value, is attended with risk of loss to the officers.

A post quartermaster sergeant, who would remain at the post, would be able to save officers and the government loss which results from such sudden and frequent changes. This care of supplies would prevent useless transportation and wastage.

The value of the service of ordnance and commissary sergeants is well established by experience, but the Quartermaster's Department, whose property at military posts generally exceeds in value all others combined, is without these useful non-commissioned officers.

DUTIES OF OFFICERS.

Col. Stewart Van Vliet, assistant quartermaster general, was on duty in this office in charge of the inspection branch and as inspector to January 22, 1881, when retired from active service.

Col. S. B. Holabird, assistant quartermaster general, has had charge of the finance branch and of the examination of accounts and returns of officers preparatory to their being transmitted to the Treasury for settlement.

of the supply and distribution and manufacture of clothing and garrison equipage. Also, from January 23, 1881, in inspection branch.

Col. J. G. Chandler, deputy quartermaster general, has had the transportation, regular supplies, and miscellaneous claims of the office since May 20, 1881. Prior to that date Lieut. Col. Hodges was in charge of them. Colonel Chandler previously chief quartermaster Department of the South, at Newport Ky., to February 12, 1881, and as chief quartermaster Military Division of the Gulf, at New Orleans, La., to May 20, 1881.

James M. Moore, quartermaster, has had charge of the claims and of the barracks and quarters branch of the office.

C. Card, quartermaster, has had charge of the maintenance and improvement of national military cemeteries since April 1, 1881, and done the duty of depot quartermaster at this station. Prior to Capt. A. F. Rockwell, assistant quartermaster, was in charge, and had previously been on duty as chief quartermaster, Department of Texas, at San Antonio, Tex. Other principal regular stations occupied as follows:

H. Rucker, assistant quartermaster-general, has been in charge Philadelphia general depot of the Quartermaster's Department, Philadelphia, Pa., the principal depot for purchase and manufacture of stores for the Army.

Rufus Ingalls, assistant quartermaster general, chief quartermaster Military Division of the Missouri, Chicago, Ill., to February 17, 1881, he then in charge of the general depot of the Quartermaster's Department at New York City.

C. Easton, assistant quartermaster general, had charge of the depot of the Quartermaster's Department at New York City to February 27, 1881, when retired from active service.

H. Tompkins, assistant quartermaster general, chief quartermaster Department of Dakota, Saint Paul, Minn., to February 15, 1881; and chief quartermaster Military Division of the Missouri, Chicago, Ill.

Col. James A. Ekin, deputy quartermaster general, in charge general depot of the Quartermaster's Department at Jefferson City, Mo., disbursing officer of the Quartermaster's Department at Louisville, Ky., and in charge of the National Military Cemeteries in Kentucky, Tennessee, and of investigation of claims in Kentucky, Ohio, and Indiana.

Col. Rufus Saxton, deputy quartermaster general, chief quartermaster Military Division of the Pacific and Department of California, San Francisco, Cal.

Col. J. D. Bingham, deputy quartermaster-general, chief quartermaster Department of the Missouri, Fort Leavenworth, Kans.

Col. A. J. Perry, deputy quartermaster general, chief quartermaster Military Division of the Atlantic and Department of the East, New York Island, New York Harbor.

Col. Henry C. Hodges, deputy quartermaster-general, until February 1881, on duty in the Quartermaster General's Office, and since February 1881, chief quartermaster Department of Arizona, Whipple Barracks, Prescott, Ariz.

Col. William Myers, deputy quartermaster-general, depot quartermaster Chicago, Ill., to February 17, 1881; since then chief quartermaster Department of Dakota, Fort Snelling, Minn.

Col. Charles G. Sawtelle, deputy quartermaster-general, chief quartermaster Department, of Columbia, Vancouver Barracks, Wash-

ington Territory, to April 12, 1881; since then chief quartermaster Department of the South, Newport Barracks, Ky.

Maj. James J. Dana, quartermaster, chief quartermaster District of New Mexico, Santa Fe, N. Mex., to August 7, 1880; since then in charge of investigation of war claims in Tennessee, Nashville, Tenn.

Maj. R. N. Batchelder, quartermaster, in charge of the general department of the Quartermaster's Department at San Francisco, Cal.

Maj. M. I. Lullington, quartermaster, chief quartermaster Department of the Platte, Fort Omaha, Nebr.

Maj. C. A. Reynolds, quartermaster, disbursing quartermaster, Buffalo, N. Y.

Maj. George B. Dandy, quartermaster, purchasing and shipping quartermaster at Portland, Oreg., to June 1, 1881; since April 12, 1881, chief quartermaster Department of Columbia, Vancouver Barracks, Washington Territory.

Maj. George H. Weeks, quartermaster, depot quartermaster, Fort Leavenworth, Kans.

Maj. William B. Hughes, quartermaster, depot quartermaster, Saint Louis, Mo., to March 31, 1881; since then chief quartermaster Department of Texas, San Antonio, Tex.

Maj. A. G. Robinson, quartermaster, disbursing quartermaster District of Montana, Helena, Mont.

Maj. E. D. Baker, quartermaster, depot quartermaster, San Antonio, Tex., to April 3, 1881; since then depot quartermaster, Saint Louis, Mo.

Maj. J. G. C. Lee, quartermaster, in charge of construction of buildings at Fort Assinaboine, Mont., to September 24, 1880; from November 13, 1880, chief quartermaster District of New Mexico, Santa Fe, Mex.

Maj. James Gilliss, quartermaster, post quartermaster, and quartermaster of artillery school, Fort Monroe, Va.

Maj. T. J. Eekerson, quartermaster, chief quartermaster District of the Rio Grande, Fort Brown, Tex., to April 5, 1881; since then deputy quartermaster, Boston, Mass.

INSPECTION BRANCH.

This branch of the office reports the stations and duties of the officers of the Quartermaster's Department, and those of the line officers and officers of other branches of the staff on duty in the Quartermaster's Department as acting assistant quartermasters.

Three hundred and six have been on such duty for longer or short periods during the year. A list of their names and stations accompanies this report.

It prepares the monthly returns of officers of the Quartermaster's Department for the Adjutant-General's Office. It files and examines the annual reports of officers; files and distributes general and special orders, rolls of honor, and other printed documents relating to the Quartermaster's Department. It attends to procuring and distributing to military posts the reading matter furnished to them in connection with the system of military schools and instruction of soldiers and of the children. This reading matter consists principally of the current periodical literature of the day, for which, however, when desired by a post, a supply of school books is occasionally substituted. The total expenditure to supply the schools with reading matter during the year has been about \$9,000.

Eighty five thousand seven hundred and forty nine general orders and other printed papers have been received, and 63,712 sent out during the year.

TRANSPORTATION.

movement during the year was of 46,658 persons, 10,355 beasts, 332 tons of material, costing \$1,802,931.37, of which \$393,156.27 for transportation of persons and \$1,409,775.10 for freight.

Major movements of troops were:

Cavalry, Companies C, G, and L, from Department of the Platte to Department of the Missouri, 291 miles.

Artillery, Companies E, G, and L, from Department of Texas to Department of the South, 1,080 miles.

Fourth Infantry, headquarters and ten companies, from Department of the Missouri to Department of Texas, 705 miles.

Fourth Infantry, headquarters and ten companies, from Department of Texas to Department of the Missouri, 608 miles.

RAILROAD TRANSPORTATION.

Were moved by rail 32,820 persons, 8,782 beasts, and 83,510 tons of material and supplies.

As to the appropriation for transportation of the Army has been \$40 for passengers and \$407,912.66 for stock and freight.

Bonded Pacific railroads have earned \$836,638.05 for military transportation, which sum is withheld by the Secretary of the Treasury under the law of 7th May, 1878, to the liquidation of their debts to the United States.

Due at full tariff rates of transportation over the land grant railroads during the year is estimated at \$250,000.

Is no appropriation available for the payment of military transportation over land grant railroads during the fiscal year.

Under the existing laws, as interpreted by the courts, the land grant railroads are entitled to compensation for all military transportation service performed by them, respectively, subject to a fair rate for the use of their respective railroads. Assuming this to be 50 per centum of the ordinary rates in accordance with the act of 24th February and of 3d March, 1881, the estimated amount of compensation for railroads for service during the year is \$125,000.

Unsettled railroad accounts, aggregating \$200,000, are outstanding and not to be paid until means are provided by Congress.

Total value at tariff rates of service rendered to the War Department by railroads during the year is \$1,807,280.61.

BONDED PACIFIC RAILROADS.

Following tables state the military transportation during the fiscal year on the several Pacific railroads named.

Names of companies	Number of persons transported	Number of animals transported	Freight transported	
			Tons	Value
.....	6,102	1,296	14	37 24
.....	677	415	17	697 49
.....	1,608	1,133	9	68 20
Pacific	6.6	24	3	44 07
.....	9 093	849	43	14 067

Union Pacific Railway Company and now styled Union Pacific Railway Company

The cost of this service is stated as follows:

Names of companies.	Amount of accounts referred to Treasury for settlement	Amount of accounts referred and settled by exchange from June 30 1881	Estimated amount of accounts not yet rendered	Total
Union Pacific	\$27 00	\$113 411 91	\$192 064 25	\$305 483 16
Central Pacific	58,213 10	115,114 87	115,090 08	288,418 05
Kansas Pacific		1,938 21		1,938 21
Sioux City and Pacific	18 00		4,507 61	4,525 61
Total	85,508 10	430,554 99	311,661 94	\$807,725 03

The following is a statement of unsettled accounts with these roads on 30th June, 1881, either in this office or in the Treasury Department, under adjustment:

Names of companies	In Treasury	In Quarters for General's Office	Total
Union Pacific	\$110 050 00	\$119,760 95	\$229,810 95
Central Pacific	29,660 50	133,038 11	162,698 61
Kansas Pacific	50,541 60	81,202 51	131,744 11
Total	190,252 10	333,991 57	\$524,243 67

The total earnings of these railroads on account of military transportation, from their first opening to 30th June, 1881, is stated as follows:

Names of companies	Amount paid in cash	Amount credited on bonds under act of July 2, 1864	Amount withheld under act of March 3, 1873 (Rev. Stat. 6200)	Amount withheld under act of May 7, 1878	Total
Union Pacific	\$1,693,360 69	\$1,693,360 87	\$3,177 087 61	\$108,518 89	\$3,504,327 05
Central Pacific	261 106 21	261 106 29	659 124 07	232,846 21	545,248 78
Kansas Pacific	881 152 71	881,152 76	545 408 21	.....	1,307,713 68
Sioux City and Pacific	3,594 28	3,594 29	39 40 82		7,228 79
Total	2,839,213 89	2,839,214 21	4,421,411 69	341,365 10	\$8,000,204 89

The acts approved March 3, 1873 (section 5260, Revised Statutes), May 7, 1878 (section 2, 20 Statutes, page 58), and March 3, 1879 (Statutes, page 420), are the laws which govern the adjustment of both Pacific railroad accounts for military transportation.

These laws are quoted in the report of Lieut. Col. J. G. Chandler in charge of the transportation branch of this office, which accompanies this report.

LAND GRANT RAILROADS.

In the act making appropriations for support of the Army for fiscal year ending June 30, 1882, approved February 24, 1881, an appropriation was made in the following terms:

For the payment for Army transportation lawfully due such land-grant railroads have not received and in government bonds, to be adjusted by the proper accounts.

accordance with the decisions of the Supreme Court in cases decided under grant acts, but in no case shall more than fifty per cent. of the full amount of be paid until a final decision shall be had in respect of each case in dispute, and not exceeding twenty-five thousand dollars: *Provided*, That such payment shall be in full of all demands for said services.

Act approved March 3, 1881, making appropriations to supply arms, &c., an appropriation was made in the following terms:

Land grant railroads fifty per centum of what the Quartermaster's Department is due them for transportation during the fiscal year ending June thirtieth, hundred and eighty, and prior years, to be accepted in full of all demands for services, two hundred and seventy-five thousand dollars.

The law of February 24, 1881, provides for settlement for services rendered during the year ending June 30, 1882, and the law of March 3, 1881, provides for settlement of accounts for services rendered during the year ending June 30, 1880, and prior years, but no provision is made for payment for services rendered by the land-grant railroads during the fiscal year ending June 30, 1881, an estimate for which was submitted to Congress (see House Ex. Doc. No. 44, Forty sixth Congress, third session, page 15.).

On the 30th June, 1881, 230 accounts in favor of land grant railroads had been presented to this office, amounting as rendered, at full rates, to \$484,991.85; 213 accounts had been examined, adjusted, and forwarded to the Treasury for settlement, amounting to \$443,688.37; 17 accounts remain in this office, awaiting examination, amounting to \$1,000.00; 113 accounts have been settled by the accounting officers of the Army at 50 per centum of rates fixed by this office, amounting to \$111,000.00; and 100 accounts are awaiting settlement in the Treasury, amounting at full rates to \$181,321.63.

Following named land grant railroad companies have filed acceptances of the provisions and restrictions of the law of March 3, 1881, in payment of accounts for services rendered the War Department:

Atchafalpa, Topeka and Santa Fe.

Atchafalpa, Gulf and West India Transit Company.

Atchafalpa and Northwestern.

Atchafalpa, Rock Island and Pacific.

Atchafalpa, Burlington and Quincy.

Atchafalpa Central.

Atchafalpa Pacific.

Atchafalpa and Nashville, for the Pensacola Railroad Company.

Atchafalpa and Nashville, for the South and North Alabama Railroad Company.

Atchafalpa, Saint Paul, Minneapolis and Omaha Line, for the Saint Paul and Northern Pacific Railroad Company.

Atchafalpa, Saint Paul, Minneapolis and Omaha Line.

Atchafalpa, Saint Paul, Minneapolis and Manitoba.

Atchafalpa, Saint Paul, Minneapolis and San Francisco.

Atchafalpa, Saint Paul, Minneapolis and San Francisco.

Atchafalpa, Saint Paul, Minneapolis and San Francisco.

General Orders No. 69, September 30, 1880, and No. 57, June 22, 1881,

issued in this office and issued by the War Department, gives the names and classes of the several land grant railroads, the termini of the roads, and bounded portions of each road, and publishes extracts from laws showing conditions of grant to each so far as relates to the use of the road by the United States, together with instructions regarding settlements for military transportation over such roads as authorized by existing laws. Copies of these General Orders are appended to this report.

WAGON AND STAGE TRANSPORTATION.

On wagon wheels the department moved by contract or hire and Army teams 34,428 tons of military supplies, at a cost, as reported, \$853,007.45.

Sixty-two contracts for wagon transportation have been made and received at this office during the fiscal year.

Five thousand and forty-seven passengers and 24,744 pounds of stores have been transported by stage, costing \$91,872.44.

WATER TRANSPORTATION.

There have been moved by water during the year 8,642 persons, 1,515 beasts, and 18,681 tons of materials and supplies, at a cost of \$453,543.75. The work was done by vessels belonging to established commercial lines of water transportation, by contract, and by vessels owned and chartered by the United States.

The following named vessels are in service of the department: S. S. wheel steamer Henry Smith, in New York Harbor; propeller Ordhan, in employ of Ordnance Department, in New York Harbor; steam-tug Atlantic, in New York Harbor; steam-tug Resolute, in Boston Harbor; propeller General McPherson, in San Francisco Harbor; steam launch Thayer, at Fort Adams, R. I.; steam launch Monroe, at Fort Monroe, Va.; steam launch General Greene, at Fort McHenry, Md.; steam launch Hamilton, at David's Island, New York Harbor; steam launch General Jesup, at Governor's Island and David's Island, New York Harbor; steam launch Barrancas, at Fort Barrancas, Fla.; steamboat General Sherman, employed on the Upper Missouri and Yellowstone Rivers; schooner Matchless, at Key West, Fla.; steam launch Chelan, employed on Lake Chelan, Washington Territory; steam launch Amelia Wheaton on Lake Cœur d'Alene, Indian Territory; and steam launch Lillie Lee at Fort Totten, Devil's Lake, Dakota Territory. The cost of maintenance and of running these vessels during the year has been \$94,600.35.

The steam launch Lillie Lee was completed in July, 1879, and put in service on Devil's Lake, Dakota Territory. She is 43 feet in length over all, 10 feet 4 inches beam, and 5 feet hold, and about 10 tons burden. Reported cost, \$2,500.

The lumber for her construction was cut in the vicinity of Fort Totten, and all the labor in connection with the construction of her hull was performed by enlisted men.

The machinery first placed in her proved on trial to be of insufficient power, and in January last a set of machinery, in store at the Philadelphia depot of the Quartermaster's Department, was ordered to Fort Totten to be placed in the launch.

In August, 1879, authority was granted for supply of a steam launch at Fort Cœur d'Alene, Idaho, and of one at Camp Chelan, Wash.

The steam launch for Fort Cœur d'Alene was completed in August, 1880. Her hull was built at the post, mostly by labor of the troops. Her machinery is reported to have cost \$2,750. She is 40 tons burden and named the Amelia Wheaton.

The steam launch Chelan was purchased at Portland, Oreg. Her reported cost is \$3,510. She was transported by rail over the portage at the Cascades and the Dalles, and proceeded up the Columbia River to Priest's Rapids, at which point she struck on the rocks, was capsized and swamped. She was subsequently raised and transported by wagon to a point on the river opposite Camp Chelan. Her tonnage is 15 tons.

The total expenditure for water transportation during the year is reported at \$453,743.72.

TRANSPORTATION ACCOUNTS AND CLAIMS.

One thousand four hundred and forty accounts and claims for transportation have been adjusted in this office during the year, amounting to \$1,779,645.20; 1,307, amounting to \$1,257,497.61, were reported favorably for settlement; 84, amounting to \$77,668.22, were unfavorably reported and rejection recommended, and 49, amounting to \$64,479.37, were suspended for additional evidence; 488, amounting to \$1,269,207.63, were in the office unsettled at the close of the fiscal year.

INDEBTED RAILROADS.

At the beginning of the fiscal year* the debts of the railroad companies for railway material, purchased by them from the United States at the close of the war, under Executive orders, and not compromised or settled under special laws of Congress, and excluding two railroads declared insolvent, amounted to \$1,068,911.72. During the year interest and charges against these railroads amounted to \$42,611.49. Payments by military transportation and postal service were credited to them, amounting to \$5,088.66. Their debts on June 30, 1881, amounted to \$1,106,434.55.

In addition to the payments by transportation service, there was received on account of the indebtedness of the Nashville and Northwestern Railroad Company the sum of \$2,475.83, being the balance due the Quartermaster's Department from the postal earnings of that road.

The amount due the Mobile and Ohio Railroad Company, being 50 per cent. of its earnings as a land grant railroad, is still withheld by accounting officers of the Treasury, pending settlement of the account of that company for material purchased.

A communication has been sent to the governor of Tennessee in relation to the indebtedness of that State for property purchased for the Tennessee and Kentucky and the Memphis, Clarksville and Louisville railroads, for which the United States holds the bonds of the State in double the value of the property purchased, requesting that if arrangements cannot be made at an early day to pay these debts, that the matter be submitted to the legislature of the State. No reply has been received, and the debts are still unpaid.

REGULAR AND MISCELLANEOUS SUPPLIES.

Animals.—One thousand four hundred and thirty-eight cavalry and artillery horses were purchased during the year, costing \$179,926.71, averaging per head \$125.12. Of these there were received in Department of Dakota, 277; Department of the Missouri, 494; Department of Nebraska, 100; Department of Texas, 192; Department of California, 61; Department of the Columbia, 61; Department of Arizona, 221; Department of West Point, 31; at New York depot, 25; at Saint Louis depot, 1.

For the Army trains 1,006 mules and 29 draught horses were purchased; the mules costing \$111,744.80, an average of \$111.97 per head, and the horses \$5,330, an average of \$183.79 per head.

One thousand four hundred and eighty-seven horses and 594 mules were sold during the year. The horses brought \$56,677.37 and the

mules \$23,530.60; total, \$80,207.97; which is deposited in the Treasury to credit of miscellaneous receipts, except the small sum realized from sales of horses to officers.

The following is a summary of the number of animals purchased, sold, died, &c., during the year and remaining on hand June 30, 1881:

	On hand June 1, 1880	Purchased.	Taken up &c.	Total	Sold.	Died	Lost and stolen	Total disposed of	On hand June 30, 1881
Horses	10,504	1,467	131	12,302	1,487	416	123	2,056	10,246
Mules	1,724	1,006	90	2,820	594	520	154	1,268	1,552
Oxen	20	...	...	20	...	...	...	...	...

FUEL, FORAGE, AND STRAW.

The issues of fuel during the year have been 120,288 cords of wood and 39,386 tons of coal.

The issues of forage were 654,012 bushels of corn, 832,918 bushels of oats, 224,047 bushels of barley, 67,891 bushels of bran, 55,293 tons of hay, 31 tons of fodder, and 2,723 tons of straw.

The law of February 24, 1881, provides that there shall be no discrimination in the issues of forage against officers serving east of the Mississippi River, and the estimate of appropriation for purchase of forage for the fiscal year ending June 30, 1883, submitted by this office has been increased accordingly.

The law which abolished issue of fuel to officers causes great hardship to those who are stationed at military posts in inclement climate and on the prairies, where fuel is scarce and costly.

It is much to be desired that this allowance be restored. It is even more unjust to those in the wilderness than the abolition of the forage allowance was to those living east of the Mississippi. That injustice has been put an end to by the law of February 24, 1881, but the question of fuel failed to meet Congressional remedy.

CONTRACTS.

During the year 822 contracts were filed in this office; 564 were for 34,784,602 pounds of corn, 23,500,099 pounds of oats, 9,953,000 pounds of barley, 907,600 pounds of bran, 97,867,970 pounds of hay, 6,090,000 pounds of straw, 100,755 cords of wood, 96,216,062 pounds of coal, 49,600 pounds of charcoal; 22 contracts for indefinite quantities of fuel and forage; 2 for work upon national cemeteries; 65 for clothing, camp and garrison equipage; 8 for horses and mules; 4 for harness; 68 for transportation; 12 for buildings; 2 for army wagons and ambulances; 4 for stationery; 10 for building material; 5 for veterinary supplies; 1 for mineral oil; 3 for lamps; 25 for miscellaneous services; 26 leases and 1 charter party.

WAGONS AND HARNESS.

There were purchased during the year 245 six mule army wagons, 125 two horse wagons; 42 spring wagons; 3 trucks, and 1 ambulance. Of these, 225 six mule wagons, purchased under contract at Leavenworth,

horses, cost \$114.75 each; and 20, purchased under contract at San Francisco, Cal., cost \$200 each. The two horse wagons cost \$104.75 each, and the spring wagons, manufactured at Leavenworth, cost \$173.50 each, and the wagons manufactured at San Francisco, cost \$208 each.

There were purchased under contract 75 sets six-mule harness; 25 sets four-mule ambulance harness, and 50 sets cart harness. Fifty sets six-mule harness, manufactured at Leavenworth, Kans., cost \$65.50 per set; and 25 sets, manufactured at San Francisco, Cal., cost \$87 per set. The ambulance harness was manufactured in San Francisco for \$79.56 per set, and the cart harness was manufactured in Oregon Territory for \$19 per set.

Seventy five sets six-mule harness and 100 sets ambulance harness have been manufactured for the Army at the military prison at Fort Leavenworth, Kans., and received during the year. The six-mule harness cost \$88.107 per set, and the ambulance harness \$58.07 per set.

Under the orders of the Secretary of War, communicated to this office on 22d June, 1881, all harness for the Quartermaster's Department will be manufactured at the military prison, the necessary funds for purchase of material and for other expenses incident to the manufacture to be supplied by this department.

STOVES.

Two hundred and fifty-six Army cast iron heating stoves were delivered to the department during the year by the Ordnance Department, who manufactures them at the Rock Island Arsenal, Illinois. Their aggregate cost was \$3,727.82. Request was made on the Ordnance Department for 275 more, which have not yet been delivered.

LIGHTS.

In obedience to orders of the Secretary of War, a board of officers was convened at Fort Columbus, New York Harbor, by special orders from Headquarters Military Division of the Atlantic, dated June 30, 1879, to examine and report upon the subject of lighting barracks with mineral oil. Upon the report of the board, and the recommendation of this office, the Secretary of War authorized the trial of mineral oil and lamps in the public buildings at certain military posts.

Three different patterns of lamps were selected for the trials, one of brass, manufactured by John F. Donnell, of New York City, costing \$4.40; one of bronze, manufactured by R. Hollings & Co., of Boston, Mass.; and one of brass, manufactured by the Manhattan Brass Company, of New York City, in accordance with drawings prepared in this office, at a cost of \$4.40; 133 lamps of each pattern, and 10,000 gallons of mineral oil having a flash point not lower than 135° Fahr., were purchased and distributed to the several military posts located in different sections of the country selected for the trials. These trials have resulted in the selection of the brass lamp manufactured by the Manhattan Brass Company, in accordance with specifications prepared by this office, as the most suitable for the use of the Army, and its adoption for that purpose has been approved. It is made in two styles—a two-burner pendant and a single light bracket lamp. Copies of the specifications and drawings of the lamps, reflectors, brackets, and other parts of the lamps accompany this report.

In the annual estimates of appropriation for service of the Quartermaster's Department for the fiscal year ending June 30, 1882, a sum

was included under the head of "regular supplies" for the purchases of lamps and oil for use of the Army, and an appropriation made accordingly in the act of Congress approved February 24, 1881.

General Orders No. 50, Headquarters of the Army, Adjutant-General's Office, May 24, 1881, publishes regulations for the supply, by the Quartermaster's Department, of all lights for the Army heretofore supplied by the Subsistence Department, except to troops in the field, on detached service, &c., where lamps cannot be used. To these the Subsistence Department will continue the issue of the established ratio of candles.

Lamps and mineral oil are now being supplied to the Army in accordance with these regulations. So far as can be at present estimated the new method of lighting will cost about \$2,500 per annum more than the old.

EXPLORING EXPEDITIONS.

The Quartermaster's Department has furnished supplies for the exploring expedition under Lieut. A. W. Greely, Fifth Cavalry, acting signal officer.

HORSE BLANKETS, ETC.

Standards have been adopted for Army horse blankets, saddle blankets, pack-saddle blankets, and paulins, specifications for which accompany this report.

MISCELLANEOUS CLAIMS AND ACCOUNTS.

On July 1, 1880, there were on file 12,911 miscellaneous claims, amounting to	\$6 965 673 42
And 364 accounts for	6 707 58
820 claims and accounts were filed during the year, amounting to	184 472 00

Total 14,095, amounting to	7,215,448 00
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Forty-four claims were passed for \$2,121.63, being a deduction in the amount, as presented, of \$2,208.76; 255 claims, amounting to \$35,644.17, were referred to other departments to which they pertained; 155 claims were transmitted to the Third Auditor for action of the accounting officers of the Treasury, amounting to \$25,087.72; and 148 claims, amounting to \$42,321.60, were rejected.

One hundred and eighty-six accounts, amounting to \$13,554.20, were approved, being \$239.30 less than their face. Three hundred and forty-eight accounts, for \$84,185.19, were referred to other departments to which they pertained. Twenty, amounting to \$3,224.28, were rejected. Total miscellaneous claims disposed of, 1,156 claims and accounts, amounting, as presented, to \$208,586.85. Twelve thousand seven hundred and seven miscellaneous claims and 232 accounts remain on file, amounting to \$7,010,261.19.

CLAIMS FOR QUARTERMASTERS' STORES PRESENTED UNDER ACT OF JULY 4, 1864.

The act of March 3, 1879, barred all those war claims for quartermasters' stores not presented prior to January 1, 1880. Claims presented and filed after that date are filed away or returned to claimants or their attorneys.

Claims presented to military boards, commissions, &c., instituted

ing the war, are held as having been presented before the statute of limitation began to run. Forty four of these claims previously presented to military boards were called up during the fiscal year, and that number has been added to the docket of cases under consideration.

There were investigated by agents during the fiscal year, 3,813 claims, amounting to \$2,287,729.22.

The total cost to the appropriation for the support of the Army for service, &c., of agents and employes engaged on these claims amounts to \$139,604.63.

The discharge on the 31st of March, 1881, of the agents and clerks and the reduction of salaries of others engaged on these claims, by reason of the low state of the appropriations for support of the Army, in which alone these salaries and expenses are paid, interrupted the work to some extent during the fiscal year.

The total number of claims on hand for consideration during the year was 22,935, amounting to \$12,034,750.29.

One thousand one hundred and forty-nine claims were reported to the Third Auditor during the year with recommendation for settlement of \$227,680.39, which was \$344,898.93 less than claimed.

Nineteen hundred and ninety-five claims, amounting to \$1,885,173.82, were rejected during the year. Thus 3,144 claims, amounting to \$57,753.14, were finally disposed of by this office during the year.

The docket shows that 2,018 claims not finally acted on had been investigated and prepared for the action of the Quartermaster-General at the end of the fiscal year, making a total of 5,162 cases prepared for adjudication during the year.

The summary of the work for the year is very satisfactory.

In the report of the claims branch of this office will be found a table showing the work done since the passage of the act of July 4, 1864.

HALL OF RECORDS.

I renew a recommendation, frequently made heretofore, that an appropriation be made to erect near the executive departments a building for the safe keeping of public records, rolls of the Army, pay rolls, &c., which accumulate yearly in the costly buildings now devoted to executive business, and which now occupy rooms which have cost millions, to the great embarrassment of the public service. If such of these rooms as are not in frequent use were placed in a cheap, thoroughly fire-proof storehouse, they would be safer than where they now are, and the costly rooms could be devoted to the transaction of current official business. Such a building, I believe, could be constructed for about \$50,000, and I again submit a plan which I caused to be prepared some time since. The site which I have thought most appropriate, I believe, while looking for a site for a new Pension Office, ascertained to be such divided, and I believe it will be well to provide for acquiring the same and paying through the action of the courts of the District of Columbia the value of those parts of it which belong to minors, or for such prices deemed excessive may be demanded. An appropriation for this building passed the Senate unanimously, but was lost in conference in the last days of the last Congress. In connection with this matter I submit the following table, &c.

The following table of cost of various public buildings has been communicated to the Quartermaster-General. He adds the cost of the

new fire proof National Museum building in Washington, and new barracks lately completed at Fortress Monroe, Va.

Buildings.	Cubic feet.	Total cost.
Sub-treasury and post office Boston, Mass.	2 617 438	\$2 080, 507
United States branch agent San Francisco, Cal.	1 080 705	1 500, 000
Custom and court house and post office Cairo, Ill.	444 970	271 081
Custom and court house and post office Columbia, S. C.	587 010	381 000
United States building Des Moines, Iowa	413 987	221 437
United States building Knoxville, Tenn.	542, 362	398, 247
United States building Madison, Wis.	541, 483	329, 680
United States building, Ogdensburg, N. Y.	447, 585	210, 578
United States building Omaha, Nebr.	654, 705	334, 000
United States building Portland, Me.	524 886	392, 116
German Bank Fourteenth street Newport, R. I.	600 000	475 000
Staats Zeitung New York City	508, 000	475 100
Western Union Telegraph New York City	1, 430, 000	1, 400 800
Massachusetts Temple, New York City	1 763, 830	929 800
Centennial Building Shepherd's corner Twelfth street and Penn sylvania avenue Washington D. C.	931, 728	246, 973
United States National Museum brick and iron fire proof building	3 843 611	250, 000
Brick barracks, company quarters Fortress Monroe, Va.	1 000, 000	50, 000

BARRACKS AND QUARTERS.

The construction of 132 new buildings, comprising barracks, quarters, stables, storehouses, guard houses, &c., has been authorized during the year, at an estimated cost of \$239,445. They are at posts in twenty one different States and Territories.

Repairs to existing buildings have been authorized at an estimated cost of \$4

The cost of new buildings in Department of the East, is stated at

Repairs

Department of the South, new buildings ..

Repairs

Total, Division of the Atlantic

Department of the Missouri, new buildings

Repairs

Department of Dakota, new buildings

Repairs

Department of the Platte, new buildings

Repairs

Department of Texas, new buildings

Repairs

Total, Division of the Missouri

Department of Arizona, new buildings

Repairs

Department of the Columbia, new buildings

Repairs

Department of California, new buildings

Repairs

Total, Division of the Pacific

Of the above mentioned sums devoted to construction and of public buildings, \$13,428 has been allotted to the erection of buildings or the fitting up of existing ones for schools and military posts.





Repairs of wharves have been authorized at—

ac-
cer-

Fort Barrancas, Fla	9
Beaufort Island, Cal	
Angel Island, Cal	
West Point, N. Y	

Total

The site for the new military post authorized by act of Congress approved May 8, 1880, to be established at or near the Musselshell Montana Territory, at a cost not to exceed \$50,000, has, by authority of the Secretary of War, been located twelve miles east of Blackfoot opposite Cone Butte Pass on Ford's Creek, a tributary of the M. J. Bell River. The post has been named Fort Maginniss.

The site and buildings of Fort Logan, Mont., have been sold at public auction, as authorized and directed by the act of Congress approved May 8, 1880, and the amount realized therefrom, \$4,525, will be expended for the establishment of the new post near the Musselshell River, as provided in the act referred to.

HOSPITALS.

Of the amount appropriated for hospital construction, \$75,000, the sum of \$74,588 has been expended for construction, repair, and alterations, as follows:

the Department of the East, 19 hospitals	\$25,420 00
the Department of the South, 8 hospitals	2,398 00
Total Division of the Atlantic	28,418 00
the Department of Arizona, 6 hospitals	2 404 00
the Department of California, 7 hospitals	1,781 00
the Department of the Columbia, 10 hospitals	10,452 00
Total, Division of the Pacific	14,637 00
the Department of the Platte, 7 hospitals	10 673 00
the Department of Dakota, 16 hospitals	9,364 00
the Department of the Missouri, 19 hospitals	8,031 00
the Department of Texas, 10 hospitals	3 405 00
Total, Division of the Tennessee	31 473 00

SCHOOL-HOUSES.

During the year authority has been given under the act of 28th July, 1866 (Revised Statutes, sec. 1231), for the erection or fitting up of 12 buildings for school or religious purposes at the following military posts:

Fort Hamilton, New York harbor, costing	\$1,500
Fort Wayne, Mich., costing	250
Fort Huachuca, Ariz., costing	1,765
Fort Huachuca, Ariz., costing	1,355
Fort Conrad Albion, Idaho, costing	1,500
Fort Vancouver, Wash., costing	1,788
Fort Walla Walla, Wash., costing	721
Fort Hancock, Nev., costing	404
Fort Brown, Texas, costing	1 090
Fort Custer, Mont., costing	1 180
Fort Snelling, Dak., costing	575
Fort Brown, Texas, costing	1 500
Total cost	13 428

In the sundry civil bill of June 20, 1878, an appropriation of \$25,000 was made for beginning the erection of barracks at Fortress Monroe, Va., and an additional appropriation of \$34,000 was made in the sundry civil bill of March 3, 1879, to complete the work. A plan of the buildings as erected accompanies this report. They were completed for the sum appropriated by Congress.

A plan of the barracks to be erected at Fort Leavenworth, as adopted by the Secretary of War, also accompanies this report. The appropriation made in the sundry civil bill, approved March 3, 1881, \$30,000 for the erection of buildings at this post, is not sufficient to do all the work, and only one wing of the building has been commenced. It is estimated that the appropriation will complete this wing, containing barracks for three companies of troops.

The new headquarters at Fort Snelling have been completed, excepting some of the minor edifices, as the quarters for clerks.

The Quartermaster-General has lately inspected them and finds them excellent buildings, very comfortable, and very well and economically built. No further appropriation is asked.

PROPERTY TRANSFERRED.

By General Orders No. 46, headquarters of the Army, dated May 12, 1881, the arsenal at Washington, D. C., was abolished, and the grounds and buildings transferred from the Ordnance Department to the Quartermaster's Department. The post is designated Washington Barracks, and is just now garrisoned by five companies of artillery.

SALES OF BUILDINGS.

Seventy-six old buildings, located in Nebraska and in the Territories of Wyoming and Montana, some temporary shelters in Idaho, and a quantity of old building material in Texas have been sold during the year. The proceeds go to the credit of miscellaneous receipts in the Treasury and not to the use of the military service.

MILITARY SITES IN TEXAS.

The title to the land upon which Ringgold Barracks is located has been perfected, and has been approved by the Attorney-General of the United States, and the purchase money, \$20,000, appropriated by act of Congress approved March 3, 1875, together with the sum of \$500, appropriated in the sundry civil bill of June 16, 1880, to complete the purchase, has been paid into the hands of the proper officer of the district court of Starr County, Texas, in which court the decree for purchase of the land was granted. This site is now the property of the United States.

The question of purchase of the sites of Forts Brown and Duncan, for which special appropriations were made in the sundry civil act of March 3, 1875, remains unchanged since my last annual report, the owner still declining to accept the sums appropriated for the purpose.

A suit instituted in the district court of Cameron County, Texas, against the heirs of Maria Josepha Cavazos, owners of the site of Fort Brown, for condemnation of the land, has been decided adversely to the United States.

A tender of the sum appropriated by Congress for the purchase of the site of Fort Brown, \$25,000, was made on 21st February, 1880, by

QUARTERMASTER-GENERAL.

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The Secretary of War to the attorney for the owners, to which has been received, so far as this office is informed.

By an act of Congress approved April 16, 1880, \$200,000 was appropriated for the purpose of acquiring sites and erecting thereon military posts on or near the Rio Grande frontier as may be deemed necessary by the Secretary of War for the adequate protection thereof.

Since the passage of that act, the construction of railroads through the State of Texas has materially changed the lines of military operations for the protection on that frontier, and the location of the military posts has not yet been determined.

POST CEMETERIES.

Orders have been given during the year for removal of remains buried at Forts Ripley and Ridgley, Minn., to the post cemetery at Rock Island, and from Fort Dalles, Oreg., to the Vancouver cemetery; also for the erection of a fence around the cemetery at Monterey, Cal., and the erection of a few headstones therein.

FIRES.

The department has suffered loss by fourteen fires during the year. At Prescott, Ariz., the headquarters office building was destroyed; at Fort Randall, Dak., a kitchen and dining room; at Fort Apache, Ariz., the bakery; at West Point, N. Y., Fort Supply, I. T., Fort Adams, R. I., Fort Verde, Ariz., and Fort Lincoln, Dak. T., each a set of officers' quarters; at Ogden, Utah, a warehouse and office; at Fort Keogh, Mont., barracks; at Fort Washakie, W. T., a saw-mill; at Jefferson Barracks, Mo., a linc house; at Fort Russell, W. T., a stable, and at Fort Snelling, Minn., a wood shed.

MILITARY RESERVATIONS DECLARED.

The following military reservations have been declared by a proclamation of the President:

For posts:

Hot Springs, Ark., November 17, 1880.

Fort Maginnis, Mont., April 8, 1881.

White River, Colo., April 26, 1881.

Fort Assiniboine, Mont., June 16, 1881 (in lieu of that of March 4, 1880).

Fort Totten, Dak., August 20, 1881, extending the boundaries.

Fort Cummings, N. Mex., November 9, 1880, extending the boundaries.

Wood and timber reserves:

Fort Niobrara, Neb., June 6, 1881.

Fort Laramie, Wyo., February 9, 1881.

Fort Fred Steele, Wyo., November 4, 1880.

Fort Meade, Dak., April 18, 1881.

CLOTHING, CAMP AND GARRISON EQUIPAGE.

During the year some inconvenience has been experienced from not having a sufficient stock of clothing, camp and garrison equipage on hand to meet sudden demands upon the department. Illustrations of this will be found in the report of Col. S. B. Holabird, which accompanies this. He has had charge of this branch of the department since

REPORT OF THE SECRETARY OF WAR.

last report. Means should be provided by special appropriation to enable this department to lay in a stock of clothing and camp and garrison equipage sufficient to meet any emergency, say at least a year's supply ahead.

Last year the Quartermaster-General recommended that provision be made by special appropriation of \$1,000,000 for this purpose, which had the approval of the Secretary of War; but the project failed in Congress. The amount appropriated for the current fiscal year was \$1,100,000. The last session of Congress was a short one, and the department was therefore able to advertise for proposals and make contracts immediately upon the passage of the act making appropriation, in time to secure some deliveries of materials by 1st July, and providing an earlier partial supply of the needs of the Army than in the alternate years, when the appropriation is made later.

The estimate for the ensuing fiscal year, \$1,400,000, will all be required for the purchase and manufacture of clothing and equipage to which the troops are entitled under existing laws and regulations. The exact cost of the articles, based upon the last contract prices, is estimated at \$1,441,635.59. With the rise in business prosperity throughout the land prices have increased.

The manufacture of the clothing and equipage at our principal depots has been satisfactorily and economically accomplished. Under orders from this office the sewing is principally distributed to female operatives, preference being given to the widows and orphans of deceased Union soldiers, who thus receive the whole actual cost of the work, without any deduction for middlemen or contractors' profits or failures.

The following new standards have been adopted and distributed to the purchasing and manufacturing depots during the last fiscal year, viz: knit undershirts, cork helmets, canvas lined great coats, and flannels for lining capes of overcoats.

Of specifications the following have been distributed in addition to those heretofore adopted by the Quartermaster-General, viz: canvas lined great coats, conical wall tents, Sibley or conical wall-tent stoves and pipe, dark blue wool shirting flannel, undershirts, and helmets. Copies of these specifications accompany this report.

Old pattern clothing to the value of \$29,387.20 was issued during the last fiscal year to the board of managers of the National Home for Disabled Volunteers, under the act of January 23, 1873, as equivalents for 1,334 suits of clothing, for which requisition was made upon this office on the 12th of January last.

On the 3d March, 1881, Congress passed a law directing the transfer to the board of managers of the Home referred to of all the old pattern clothing still on hand. Orders to concentrate all this clothing at the principal depots at Jeffersonville, Saint Louis, and San Francisco, and to transfer it to the board, have been issued. A list of the articles which will thus be transferred will accompany the next annual report.

Issues of clothing, old and new pattern, to the value of \$5,807.46 were made by this department during the last fiscal year, under authority of the War Department, to destitute citizens, sufferers from the overflow of the Missouri River.

Issues to the value of \$2,784.56 were also made to certain Indian prisoners. Of this last amount \$1,752 have been reimbursed to the appropriations of the Quartermaster's Department by the Indian Bureau.

Under the several joint resolutions of Congress, tents and other articles of camp and garrison equipage were loaned to various organizations during the last fiscal year, at a cost to this department, in loss, damage,

and general expenses, of \$2,038.31. A statement thereof in detail accompanies the report of Col. S. B. Holabird, assistant quartermaster-general, in charge of the clothing branch of this office.

The military prison at Fort Leavenworth, Kans., was indebted to the Quartermaster's Department on June 30, 1880, for clothing and equipage issued to the prison in excess of labor performed for the Quartermaster's Department in the amount of

\$536 20

There was issued to the prison by this department during the last fiscal year clothing and equipage to the value of

11,307 37

Quartermaster's stores to the value of

2,011 32

13,854 89

The value of labor performed for the Quartermaster's Department during the fiscal year was

12,847 50

Leaving the prison account indebted to the Quartermaster's Department in the sum of

967 39

There were manufactured during the year 34,163 pairs of boots, at an average cost of \$2.90 per pair; 25,944 pairs of shoes, at an average cost of \$1.85 per pair; 1,656 barrack chairs, at an average cost of \$1.22 each; and 4,556 corn brooms, at 16 cents each, all as reported by the governor of the prison.

The materials from which the boots and shoes were made were purchased by officers of this department at the Philadelphia depot of the Quartermaster's Department under contract, and were of unexceptionable quality.

Since my last report, upon recommendation of the board of commissioners of the prison and by order of the War Department, the purchase of materials for use at the prison has been transferred to the governor of the prison. This resulted, it is understood, because of the failure of this department to furnish materials in time, causing a suspension of work at the prison, it is alleged, during a part of the previous fiscal year.

The delay in supplying the materials was in no way the result of any negligence on the part of the officers or employes of this department. There was not at the time money to the credit of the appropriation available for the purchases. Besides, there was no immediate need for additional boots and shoes at that time. As soon as money was provided and contracts were made everything possible was done to hasten supplies forward and keep the prisoners employed.

Complaints having reached this department that some of the boots and shoes manufactured at the prison were of inferior workmanship, and specimens in support of the claims having been furnished by direction of the Secretary of War, a rigid inspection by a sworn inspector of the Quartermaster's Department is now made at the prison before shipment.

At the request of many officers, helmets have been authorized for wear by officers when they are desired in lieu of dress caps, and a general order of the War Department prescribed the pattern and directed the issue of helmets, dark blue overshirts, and knit undershirts to the enlisted men of all arms of the service, and they are now being furnished, with the exception of the overshirts, for which gray flannel ones have been temporarily substituted until a stock of the blue ones can be procured.

Owing to the changes in the patterns of clothing, it was found necessary, to avoid any increase in cost, to modify the table of allowance, and the unlined blouse and extra-lined great coat have been dispensed with. The changes made have been for the benefit of the soldier, who is now better clad than at any time heretofore.

The old style helmets are being altered to conform to the new pattern, at a cost of \$6.50 per dozen.

Six thousand cork helmets have been procured, and issued to troops in warm climates.

Buffalo coats and fur caps and gauntlets have been procured for the Army. The price paid, \$14.20, for the coats is due principally to the scarcity of the buffalo, and some other material will soon have to be substituted therefor.

Steps have been taken to concentrate at the general depots all surplus clothing in the several military divisions and thus prevent the undue accumulation of clothing at military posts, at the same time replenishing the stock at the depots, now almost exhausted.

By direction of the Secretary of War, upon recommendation of the office, service chevrons are now issued to the enlisted men without charge. They being considered in the nature of a decoration for good service, it was thought proper that the soldier should not be required to pay for them. A slight change has been made in them to conform to a decision of the General of the Army.

The governor of Missouri having informed the Secretary of War that some of the hospital tents loaned to that State for the use of sufferers from tornadoes were ready to be returned, this office has recommended that they be sent to the general depot at Saint Louis, Mo., and that the Quartermaster-General be notified for record.

NATIONAL MILITARY CEMETERIES.

There are eighty national cemeteries, and on June 30, 1881, there were seventy superintendents.

Six superintendents were appointed, two died, two resigned, and three were discharged or dismissed during the year.

There were 219 interments made during the year, making the total number of interments in the national cemeteries on June 30, 1881, 318,859. All soldiers' graves in these cemeteries have been marked with marble or granite headstones as provided by law, and neat marble slabs will be erected at the graves of others than soldiers yet remaining to be permanently marked as fast as means will permit.

Only a few of the headstones required for soldiers' graves in private and village cemeteries have been erected. One of the contractors has failed to properly carry out his agreement, and the sureties on his bond have finally undertaken to complete the work.

The cemetery road at Vicksburg, Miss., will, it is hoped, be completed this fall, and the road leading to the Fort Scott National Cemetery will be constructed so far as the means appropriated will permit. These not being sufficient to finish this work, an additional sum of \$7,000 is asked for the Fort Scott road.

The work of constructing the Chattanooga Cemetery roadway, which was authorized by Congress at its last session, has not been begun, as the title to the necessary right of way has yet to be secured.

The amount granted was \$5,000, which is not sufficient to complete a substantial road. The estimated cost of a macadamized road, well drained, is \$15,000, and the difference has been asked for.

The subject of improving the road to the Arlington Cemetery, near this city, is again referred to in this connection. The desirability of providing a decent approach to this beautiful cemetery is obvious on account of its proximity to the capital and the consequent large number of visitors. At present the road in some places is frequently almost impassable.

I repeat a recommendation heretofore made, that the Arlington Cemetery, containing 208 acres of land, now laid out and improved at the cost of the United States, be declared and constituted by law the official national cemetery of the government, and that its space, not needed for the interment of soldiers, be used for the burial of officers of the United States, legislative, judicial, civil, and military, who may die at the seat of government or whose friends may desire their interment in a public national cemetery. It is safe from encroachment of the rapidly extending cities of the District of Columbia. It is a safe distance from the population of the cities, while the existing Congressional Cemetery is rapidly filling up, and the extension of the inhabited and populous part of Washington threatens before many years to make it necessary to abandon the practice of interment within its limits. Almost all great cities have forbidden the use of cemeteries within their corporate bounds.

It has become evident that additional space will be required for a military cemetery near New York Harbor, and at Baltimore, Md. At Cypress Hills the United States owns a number of lots nearly filled, and the purchase of additional lots has been recommended, but the Quartermaster-General, deeming the purchase and improvement of the lots offered too costly, has instituted inquiry looking to the purchase of a few acres of land suitable for the purpose.

The purchase of an additional piece of ground adjoining the Loudon Park Cemetery at Baltimore has been ordered.

Several of the burial lots owned by the United States in the city of Philadelphia it would seem are in danger of being disturbed by the opening of new streets through the cemeteries, and it may therefore become necessary to establish a new national cemetery in the vicinity of that city and to remove the bodies thereto.

SITE AND BUILDING FOR A NEW PENSION OFFICE.

On the 28th of February last, I had the honor to be consulted by members of the Senate Appropriation Committee as to the possibility of constructing for \$250,000 to \$300,000 a fire proof building of brick and metal, sufficient for the Pension Office, upon principles of construction somewhat like those which governed the design and erection of the new fire proof National Museum building, which cost \$250,000, and which contains 3,843,000 cubic feet of space, and about 110,000 square feet of floor surface. The sundry civil bill, approved 3d March, 1881, contained the following proviso:

For the purchase of a suitable site in the city of Washington for the erection of a brick and metal fire-proof building to be used and occupied by the Pension Bureau, the building to be erected in accordance with plans approved by the Secretary of War and the Secretary of the Interior under the supervision of the Quartermaster General of the United States Army, the site for which shall be selected by him, subject to the approval of the Secretaries aforesaid, both as to location and price, and the title to the land to be approved by the Attorney-General of the United States, two hundred and fifty thousand dollars.

From the discussion in committee room I knew that the intention of the authors of this law was that the appropriation of \$250,000 should be applicable to the purchase of the site and also to the erection of the building. The omission of the word "and," after the word "Washington," in the printed law, however, prevented any application of the money to construction. The question was submitted to the Department of Justice, and the honorable the Attorney-General thus decided.

Upon submitting the matter to the Secretaries of War and of the

Interior, they held that the evident intention of Congress was to limit the cost of site to a small portion only of the appropriation, and with their verbal authority I proceeded to invite, through the public press, offers of sites deemed by the owners suitable for a Pension Office. I received many such offers, all of which received prior to the 19th April 1881, I submitted, on that date, to the Secretaries, then designating the site which I considered it my duty to select and submit for their approval the eastern portion of square No. 171, which lies near the State Department building, fronting on Seventeenth street, New York avenue, and E street, northwest. Here a plat containing 59,919 $\frac{1}{2}$ square feet of ground was offered at the price of \$1 per square foot. A few others, received later, were also submitted, but made no change in this selection. I am not yet advised that any conclusion has been reached as to this site.

I also caused to be prepared plans and drawings of a building to be 200 feet square, to be three or four stories high, to contain 91,200 square feet of floor, and to cost, including the site, from \$250,000 to \$300,000, which from long experience in conducting the business of a branch of the executive departments in Washington I believe to be well suited for the transaction of such business.

I find that the Pension Office needs accommodation for about 600 clerks, double the number named to me when first consulted, but the building as designed will come within the sum named, \$300,000. It will have no dark corridors, passages, or corners. Every foot of its floors will be well lighted and fit for the site of desks at which to examine and prepare papers. It will be thoroughly ventilated, every room having windows on two sides, one opening to the outer air, the other into a central court covered from the weather by a non-conducting fire-proof roof, with ample windows above for escape of warm and foul air, and for the free admission of light. The windows are to be double glazed to prevent loss of heat in winter.

The public buildings of the executive departments are almost all subject to the disadvantages of dark and gloomy central corridors, which being provided with windows at the extreme ends only, are both ill lighted and ill ventilated, and the accumulation of documents and records and of business has, in most of them, caused the construction of screens at the ends which form additional rooms for clerks, messengers, and others, but which cut off a large portion of the little light provided in the original designs.

The idea of the plan of the building recommended for a Pension Office is not new. It is the general plan of the best buildings for habitation and for public business in Rome and in many other cities of Europe, in climates like that of Washington. Such are the Palazzo Farnese, the Cancelleria, the Vatican, and many others in Rome.

The improvements in manufacture of iron beams and of glass, and the progress in the building arts since those buildings were erected, during the revival of architecture known as the renaissance, or the cinquecento period, in Italy, have made possible the addition of durable and safe roofs of large span, covering central court-yards and making their whole space available for office purposes as well as for ventilation of the building.

The walls are intended to be constructed of brick; the window dressings of either cast iron or of terra cotta, *i. e.*, of molded and baked brick, and the roofs and floors of masonry, resting upon iron beams. These plans I submitted to the honorable the Secretaries of War and of the Interior on the 22d September, 1881.

A building upon this method of construction has the advantage of being cheaply warmed. The National Museum, containing 3,843,000 cubic feet of space and about 110,000 square feet of floor, used during the last very severe winter, during which much of the coal was used to heat out the walls of the new building, 270 tons of coal. Its steam-heating apparatus cost only \$20,000.

The building for some years occupied by the Quartermaster-General's Office, having only 21,000 square feet of floor, 323,000 cubic feet of capacity, uses each season 120 tons of coal. It is one-twelfth as large, and uses one-half as much fuel as the Museum.

In the course of years, the economy of fuel in such buildings as the Museum and the proposed Pension Office becomes important to the Treasury.

Since the propositions to sell sites for the new Pension Office were received, the owner of a small part of the site selected by the Quartermaster General has died, and, as I am informed, intestate, leaving minor heirs; therefore it will be well, if the present Congress determines to erect a Pension Office, to provide for procuring title through the courts of any part of the site which it may be difficult to acquire by simple purchase. Indeed, it is probable that no site suitable for such a building could be acquired in this city without some such powers. The owner of a single lot might hold out for an excessive compensation over all others had agreed to a reasonable valuation.

Under the verbal authority of the Secretary of War and of the Secretary of the Interior, I advertised for offers of sites for this building and incurred the following bills:

The Washington Post, for advertising.....	\$1 50
The Evening Star Newspaper Company, for advertising	2 25
The National Republican Printing and Publishing Company, for advertising..	2 44
Amounting in all to	6 19

The Comptroller of the Treasury declined to allow and pay them; and I have also incurred a liability of \$300 for preparation of finished drawings of the proposed building. All of these items I submit, with request that Congress be requested to make provision for their settlement.

None of the appropriation of \$250,000 has been withdrawn from the Treasury or expended at this date, 24th October, 1881.

I have the honor to remain, most respectfully, your obedient servant,
M. C. MEIGS,

Quartermaster-General, Brevet Major-General, U. S. A.

BON. ROBERT T. LINCOLN,
Secretary of War.

List of papers accompanying the annual report of the Quartermaster-General, for the fiscal year ending June 30, 1881.

1. Report of Col. S. B. Holabird, assistant quartermaster-general, United States Army, of the inspection branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1881.

A.—Report of officers of the Quartermaster's Department for the fiscal year.

B. Report of stations and duties of officers of the Quartermaster's Department.

C. List of officers on duty as acting assistant quartermasters, and of the stations at which they have served during the fiscal year.

2. Report of Col. S. B. Holabird, assistant quartermaster-general, United States Army, of the operations of the accounts branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1881.

3. Report of Col. S. B. Holabird, assistant quartermaster-general, United States Army, of the operations of the clothing branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1881.

A.—Statement of articles of clothing and equipage on hand June 30, 1880; quantities purchased, manufactured, received from posts and depots, gained, so transferred to other depots and posts, expended, issued to the Army during the year, and the quantity on hand June 30, 1881.

B.—Statement of remittances on account of clothing, camp and garrison equipage during the fiscal year.

C.—Statement of amounts received and remitted by the Quartermaster's Department on account of clothing, camp and garrison equipage during the fiscal year.

D. Specifications of clothing, camp and garrison equipage adopted and distributed to officers of the Quartermaster's Department during the fiscal year.

E. Prototypes of standard helmets adopted by the General of the Army.

F. Statement of clothing, camp and garrison equipage issued to the National Home for Disabled Volunteers, under the act of January 23, 1873, during the fiscal year.

G. Statement of clothing, camp and garrison equipage issued to Indians during the fiscal year.

H. Statement of clothing, camp and garrison equipage issued to the military prison at Fort Leavenworth, Kans., during the fiscal year, and its money value.

I.—Statement of quartermasters' stores issued to the military prison at Fort Leavenworth, Kans., during the fiscal year, and its money value.

K. Statement of clothing, camp and garrison equipage manufactured at the military prison for the Quartermaster's Department during the fiscal year, and cost of materials and labor.

L. Statement of value of labor performed for the Quartermaster's Department by the military prison at Fort Leavenworth, Kans., during the fiscal year.

M.—Statement of clothing, camp and garrison equipage issued by the Quartermaster's Department to sufferers from the overflow of the Missouri River during the fiscal year.

N.—Statement of camp and garrison equipage loaned by the Quartermaster's Department, under act of Congress, during the fiscal year.

O.—Statement of clothing, camp and garrison equipage issued by the Quartermaster's Department to the Lady Franklin Bay and Point Barrow expeditions during the fiscal year.

P.—Statement of returns of clothing, camp and garrison equipage received and examined, and of letters received and written during the fiscal year.

Q.—Statement of the clerical force employed in the clothing and equipage branch of the Quartermaster-General's Office during the fiscal year.

4. Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, United States Army, of the operations of the Quartermaster-General's Office pertaining to transportation, indebted railroads, regular and miscellaneous supplies, and miscellaneous claims and accounts, during the fiscal year ending June 30, 1881.

A. Statement of all troops and property transported during the fiscal year.

B.—Statement of principal movements of troops during the fiscal year, and average length of march or movement in each case.

C.—General Orders No. 69, Adjutant-General's Office, 1880, publishing table of land-grant railroads.

D.—General Orders No. 57, Adjutant-General's Office, 1881, publishing extracts of laws relating to land-grant railroads.

E.—Abstract of contracts made by officers of the Quartermaster's Department for wagon transportation during the fiscal year.

F.—Abstract of contracts made by officers of the Quartermaster's Department for water transportation during the fiscal year.

G.—Statement of vessels owned and purchased by the Quartermaster's Department during the fiscal year.

H.—Statement of vessels chartered, impressed, or employed by the Quartermaster's Department during the fiscal year.

I.—Statement of the indebtedness of Southern railroad companies for railway material for the fiscal year.

K.—General Orders Nos. 40, 62, 67, Adjutant-General's Office, 1880, and Nos. 33 and 63, Adjutant-General's Office, 1881, in relation to contracts.

L.—Specifications for ambulance wagon, Army pattern.

and publishing amendment to specifications for Army cast-iron coal heaters and stoves for furniture, &c., for cooking-ranges.

General Orders No. 50, Adjutant General's Office, 1881, in relation to the supply of the Army.

Specifications and drawings of lamps, reflectors, brackets, &c., for lamps for tents.

General Orders No. 35, Adjutant General's Office, 1881, in relation to supplies for expedition under Lieut. A. W. Greely, United States Army.

Specifications for horse saddle and packsaddle blankets and padding.

Report of Maj. J. M. Moore, quartermaster, United States Army, of the operations of the stocks and quarters branch of the Quartermaster-General's Office for the fiscal year ending June 30, 1881.

Plan and report of merit of the new barracks at Fort Monroe, Va.

Plan of the new barracks to be built at Fort Leavenworth, Kans.

Report of Maj. J. M. Moore, quartermaster, United States Army, of the operations of the claims branch of the Quartermaster-General's Office for the fiscal year ending June 30, 1881.

Report of Maj. B. C. Card, quartermaster, United States Army, of the affairs relating to the care and maintenance of national military cemeteries for the fiscal year ending June 30, 1881.

Statement of disbursements of appropriations for national cemeteries during the fiscal year.

Report of Col. S. B. Holabird, assistant quartermaster general.

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE,
Washington, D. C., September 29, 1881.

SIR: I have the honor to submit a report of the operations of the stocks and quarters branch of this office during the fiscal year ending June 30, 1881.

The duties of this branch were principally as follows:

1. Receiving the personal narrative reports of stations and duties of all officers who have performed duties in the Quartermaster's Department, and preparing and preparing for such action as may be deemed requisite in relation to the assignments of officers, annual reports, employments, &c., under General Orders No. 106, War Department, Adjutant General's Office, 1879, and on miscellaneous subjects.

2. Issuing and distribution of orders, circulars, rolls of honor, and other matters, and corresponding in relation to same.

3. Receiving monthly returns of officers of the Quartermaster's Department, and forwarding them to the Adjutant General's Office.

4. Keeping books of "letters received" and "letters sent," relating to officers, agents, and to employes of the department.

5. Receiving requests for newspapers and other periodicals for post offices and reading rooms; ordering subscriptions for and keeping the same, under the provisions of General Orders No. 24, Adjutant General's Office, series of 1878, and No. 14, from same office, of 1879.

6. Expending and sixty nine dollars and thirty-four cents worth of miscellaneous literature, such as Harper's and Frank Leslie's publications, journals, reviews, and the more prominent daily and weekly papers, together with some foreign publications, has been for the different military post libraries, when requested by priority. These subscriptions have been made and paid for by the Quartermasters in New York City and Washington, D. C., and will extend through half of the present fiscal year.

The following is a statement of the number of orders, circulars, and books and pamphlets received and distributed during the fiscal year:

Designation.	Number received.	Number distributed.
General Orders, Quartermaster-General's Office		300
General Orders, Adjutant-General's Office ..	17,000	37,000
General Court Martial Orders, Adjutant-General's Office	28,000	13,000
Circulars, Adjutant-General's Office	2,100	1,000
Circular letters, Quartermaster-General's Office	4,500	2,000
Rolls of honor		400
Miscellaneous books and pamphlets	4,149	3,300
Total	85,749	63,700

A list of officers on duty in the Quartermaster's Department, showing their stations, period of service, &c., during the fiscal year, is inclosed.

Very respectfully, your obedient servant,

S. B. HOLABIRD,

Colonel and Assistant Quartermaster-General,

Brevet Brig. General, U. S. A.

The QUARTERMASTER GENERAL

of the Army.

QUARTERMASTER-GENERAL.

1 Montgomery C. Meigs Brigadier general and brevet major general

ASSISTANT QUARTERMASTER-GENERAL.

1 Daniel H. Rucker Colonel and brevet major general

2 Rufus Ingalls Colonel and brevet major general

3 Langdon C. Easton Colonel and brevet major general

4 Stewart Van Vliet Colonel and brevet major general

DEPUTY QUARTERMASTER-GENERAL.

1 Samuel B. Holabird Lieutenant-colonel and brevet brigadier general

2 Charles H. Tompkins Lieutenant-colonel and brevet brigadier general

3 James A. Ekin Lieutenant-colonel and brevet brigadier general

4 Rufus Saxton Lieutenant-colonel and brevet brigadier general

5 Judson D. Bingham Lieutenant-colonel and brevet brigadier general

6 Alexander J. Perry Lieutenant-colonel and brevet brigadier general

7 Henry C. Hodges Lieutenant-colonel

8 John G. Chandler Lieutenant-colonel and brevet colonel

QUARTERMASTERS.

1 William Myers Major and brevet brigadier general

In charge of the Quartermaster's Department at Washington, D. C.

In charge of the general depot of the Quartermaster's Department at Philadelphia
To February 17 1881 chief Quartermaster Military Division of the Missouri, and Chicago Ill. then forward in charge of the general depot of the Quartermaster's Department at New York City

To January 27 1881 in charge of the general depot of the Quartermaster's Department at New York City when retired from active service
To January 22 1881 inspector in the Quartermaster's Department and on duty in the Quartermaster-General's Office when retired from active service

On duty in the Quartermaster-General's Office, Washington, D. C. On February 21, commissioned as assistant Quartermaster general with rank of colonel to date January 22, 1881

To February 15 1881 chief Quartermaster Department of Dakota at Saint Paul Minn. then forward chief Quartermaster Military Division of the Missouri at Chicago Ill. On February 21 1881 commissioned as assistant Quartermaster general with rank of colonel to date January 24, 1881
In charge of the general depot of the Quartermaster's Department and investigation of claims at Jeffersonville Ind. also disbursing officer of the Quartermaster's Department and in charge of national cemeteries in Kentucky and Tennessee at Louisville Ky

Chief Quartermaster Military Division of the Pacific and Department of California, at Presidio of San Francisco, Cal
Chief Quartermaster Department of the Missouri, at Fort Leavenworth Kans.
Chief Quartermaster Military Division of the Atlantic and Department of the East at Governors Island New York Harbor From January 27 to February 28 1881 also in charge of the general depot of the Quartermaster's Department at New York City

On duty in the Quartermaster-General's Office, Washington, D. C.
To February 12 1881, chief Quartermaster Department of the South at Newport Barracks, Ky. to May 21 1881 chief Quartermaster Military Division of the Gulf at New Orleans La. then forward on duty in the Quartermaster-General's Office, Washington, D. C.

To February 17 1881 in charge of depot at Chicago, Ill., then forward chief Quartermaster Department of Dakota at Saint Paul Minn. On February 21 1881, commissioned as Deputy Quartermaster General, with rank of lieutenant colonel to date January 22, 1881

A.—Annual report of officers of the Quartermaster's Department for the fiscal year ending June 30, 1881—Continued.

No.	Name and grade.	Rank.	Duties &c.
QUARTERMASTERS—Continued.			
2	Charles G. Sawtelle	Major and brevet brigadier-general	To April 12 1881 chief quartermaster Department of the Columbia at Vancouver Barracks Wash. thence forward chief quartermaster Department of the South at Newport Barracks Ky. On February 21, 1881, commissioned as deputy quartermaster general with rank of lieutenant-colonel, to date January 24 1881.
3	James J. Dana	Major and brevet brigadier-general	To August 7 1880 chief quartermaster district of New Mexico, at Santa Fé, N. Mex. thence forward in charge of investigation of war claims in Tennessee at Nashville Tenn.
4	Richard N. Batchelder	Major and brevet colonel	In charge of the general depot of the Quartermaster's Department at San Francisco Cal.
5	Marshall I. Ludington	Major and brevet lieutenant-colonel	Chief quartermaster Department of the Platte at Fort Omaha Nebr.
6	James M. Moore	Major and brevet lieutenant-colonel	On duty in the Quartermaster General's Office Wash. Oct 19 1879.
7	Benjamin C. Card	Major and brevet brigadier-general	To March 21 1881, chief quartermaster Department of Texas at San Antonio Tex. thence forward in charge of the general depot of the Quartermaster's Department and of office of national arsenals, at Washington, D. C.
8	Charles A. Reynolds	Major and brevet lieutenant-colonel	Discharging quartermaster and in charge of transportation, at Buffalo, N. Y. To January 14 to April 13 1881 on leave of absence on surgeon's certificate.
9	George B. Dandy	Major and brevet brigadier-general	To June 1 1881 Portland and shipping quartermaster at Portland Oreg., from April 1 1880, chief quartermaster Department of the Columbia, at Vancouver Barracks Wash.
10	George H. Weeks	Major and brevet lieutenant-colonel	To January 10 1881 depot quartermaster at Fort Leavenworth, Kan. to February 28, 1881 transferring property &c. On March 4, reassumed duty as depot quartermaster at Fort Leavenworth, Kan.
11	William B. Hughes	Major	To March 31 1881 depot quartermaster at Saint Louis Mo. thence forward chief quartermaster Department of Texas at San Antonio, Tex.
12	Augustus G. Robinson	Major	Discharge of quartermaster district of Montana at Helena, Mont.
13	Edward D. Baker	Major	To April 3 1881, depot quartermaster at San Antonio Tex. thence forward depot quartermaster at Saint Louis Mo.
14	James G. C. Leo	Major and brevet lieutenant-colonel	To July 1 1880 depot quartermaster at Saint Paul Minn. to September 24 1880, in charge of construction of buildings at Fort 384 Madison, Mont. to November 13, 1880 closing accounts and en route, thence forward chief quartermaster district of New Mexico at Santa Fé, N. Mex.
ASSISTANT QUARTERMASTERS.			
1	James Gillies	Captain	To September 25 1880, en route and awaiting assignment thence forward post quartermaster and quartermaster of artillery school at Fort Marion Ariz. On February 21 1881 commissioned as quartermaster with rank of major to date January 22 1881.
2	Thompson J. Williams	Captain and brevet major	To July 20 1881, with rank of lieutenant, first of the Rocklands at Fort Brown Tex. to April 27 1881 awaiting assignment and en route thence forward post quartermaster of Kansas, Mo. On February 27 1881 transferred from post quartermaster of Kansas, Mo. to date January 21 1881.

Rank	Name	Service Record
7	William T. Howard	Depot quartermaster at Ogden, Utah To January 31, 1881 post quartermaster at Fort Adams, R. I., thence for- ward post quartermaster at Baltimore, Md.
8	George W. Bradley	Quartermaster at General's office of the Quartermaster's Department To January 2, 1881 depot quartermaster at Fort Smith, Ark., to March 4, 1881 depot quartermaster at Fort Leavenworth, Kans., to June 3, 1881 transferring property awaiting orders and en route thenceforward depot quartermaster at Island No. 1, New York
9	John H. Belcher	Depot quartermaster at Boston, Mass., thenceforward dis- tributing quartermaster at Portland, Ore. To April 30, 1881 depot quartermaster at Washington, D. C., thencefor- ward and office of national construction at Washington, D. C., thencefor- ward on detached service, in charge of public buildings and grounds in District of Columbia
10	Kara R. Kirk	Depot and post quartermaster and disbursing quartermaster district of Tennessee at Fort Lowell, Ariz.
11	Anna S. Kimball	Depot and post quartermaster at Fort Union, N. Mex., from August 7 to November 13, 1880, also acting chief quartermaster district of New Mexico, at Santa Fe, N. Mex.
12	Almon J. Rockwell	On leave of absence on surgeon's certificate. Depot quartermaster at Omaha, Neb. To December 22, 1880 post quartermaster at Camp Chapin, Wash., to May 16, 1881 en route and on detached service at Washington, D. C., thence- forward on duty connected with Yorktown Va. centennial celebration, Chief quartermaster Department of West Point, at West Point, N. Y.
13	Gilbert C. Smith	Governor of Military Prison at Leavenworth, Kans. Depot quartermaster at Cheyenne, Wyo. To February 12, 1881 in charge of construction of buildings at Fort Wayne, Mich., to May 12, 1881 chief quartermaster Department of Arkansas, at Little Rock, Ark., to June 22, awaiting orders and en route, thencefor- ward in charge of former duties connected with construction of building at Detroit, Mich.
14	Thomas B. Hunt	Depot quartermaster at Columbus Barracks, Ohio. To May 31, 1881 depot quartermaster at David's Island, N. Y., thencefor- ward post quartermaster at Fort Clark, Tex.
15	Edward J. Strang	To September 25, 1880, post quartermaster and quartermaster of artillery school at Fort Monroe, Va., to October 31, 1880 assigned to duty at San Antonio, Tex., in charge of construction of buildings, &c., to April 3, 1881, also assumed duty as depot quartermaster at San Antonio, Tex.
16	John V. Furey	To February 27, 1881 on leave of absence and on sick leave, died at Wash- ington, D. C., February 27, 1881
17	Lewis C. Forsyth	To May 31, 1881 post quartermaster at Fort McIntosh, Tex., thencefor- ward post quartermaster at Fort Brown, Tex.
18	Charles H. Hoyt	Depot quartermaster at Presidio of San Francisco, Cal.
19	Asa P. Blunt	Post quartermaster at Atlanta, Ga., from August 7 to October 2, 1880, on leave of absence on surgeon's certificate.
20	James H. Lord	
21	James M. Marshall	
22	Edwin B. Atwood	
23	John Simpson	
24	Lafayette E. Campbell	
25	Charles S. Hentschman	
26	Alonso E. Millmore	
27	Charles F. Humphrey	
28	Charles W. Williams	

A.—Annual report of officers of the Quartermaster's Department for the fiscal year ending June 30, 1881—Continued.

No.	Name and grade.	Rank.	Duties, &c.
ASSISTANT QUARTERMASTERS—Cont'd.			
29	Daniel D. Wheeler.....	Captain	Depot quartermaster at Yanton, Dak.
30	Eugene B. Gibbs	Captain	Depot and post quartermaster and on duty connected with construction of buildings at Saint Paul, Minn.
31	Charles R. Barnett.....	Captain	On February 21, 1881, commissioned as assistant quartermaster with rank of captain to date February 18, 1881. Then forward on duty as military instructor at Military Academy, Chester, Pa.
32	Charles A. H. McCauley	Captain	On February 21, 1881, commissioned as assistant quartermaster with rank of captain to date February 18, 1881. Then forward awaiting orders.
33	Edward B. Hubbard	Captain	On March 23, 1881, commissioned as assistant quartermaster with rank of captain to date March 22, 1881. To April 26, 1881, awaiting orders. Thence forward on temporary duty at general depot of Quartermaster's Department, New York City.
MILITARY STOREKEEPERS.			
1	Reuben M. Potter	Captain	On leave of absence on surgeon's certificate, at Brooklyn, N. Y.
2	Charles A. Allgood.....	Captain	On duty as acting assistant quartermaster at Fort Weddsworth, N. Y.
3	John F. Rodgers.....	Captain	In charge of clothing depot Philadelphia, Pa.
4	Gustavus A. Hall	Captain	In charge of clothing depot at San Francisco, Cal.
5	John Livers	Captain	On duty at clothing depot Philadelphia, Pa.
6	Addison Barrett.....	Captain	On duty at general depot Quartermaster's Department, Jeffersonville, Ind.
7	William F. Martin	Captain	Assistant in charge of clothing depot at Saint Louis, Mo.

	In service in 1861	Died	Retired	Gained by promotion	Lost by death	Gained by death	In service in 1862
Quartermaster-General with rank of brigadier-general	1						1
Assistant quartermasters-general with rank of colonel	4		2				4
Deputy quartermasters-general with rank of lieutenant-colonel	8						8
Quartermasters with rank of major	14				2		14
Assistant quartermasters with rank of captain	30	1			2		30
Military storekeepers with rank of captain	7						7
Total	64	1	2	0	0	0	64

B.—Addresses and stations of officers of the Quartermaster's Department, 1st of July, 1881.

I.

QUARTERMASTER-GENERAL.

Meigs, Brigadier-General M. C.

COLONELS AND ASSISTANT QUARTERMASTERS-GENERAL.

Rucker, D. H., in charge of general depot of Quartermaster's Department, Philadelphia, Pa.

Ingalls, Rufus, in charge of general depot of Quartermaster's Department, New York City.

Holabird, S. B., Quartermaster General's Office, Washington, D. C.

Tompkins, C. H., chief quartermaster Military Division of the Missouri, and in charge of depot, Chicago, Ill.

LIEUTENANT-COLONELS AND DEPUTY QUARTERMASTERS-GENERAL.

Ekin, J. A., in charge of general depot of the Quartermaster's Department, Jeffersonville, Ind., and disbursing officer of Quartermaster's Department at Louisville, Ky.

Saxton, Rufus, chief quartermaster Military Division of the Pacific and Department of California, Presidio of San Francisco, Cal.

Bingham, J. D., chief quartermaster Department of the Missouri, Fort Leavenworth, Kans.

Perry, A. J., chief quartermaster Military Division of the Atlantic and Department of the East, Governor's Island, New York Harbor.

Hodges, H. C., Quartermaster-General's Office, Washington, D. C. Under orders for duty as chief quartermaster Department of Arizona; officially continued on duty in Quartermaster-General's Office until July 15, 1881.

Chandler, John G., Quartermaster General's Office, Washington, D. C.

Myers, William, chief quartermaster Department of Dakota, Fort Snelling, Minn.

Sawtelle, Charles G., chief quartermaster Department South, Newport Barracks, Ky.

MAJORS AND QUARTERMASTERS.

Dana, J. J., Nashville, Tenn., in charge of investigation of war claims in Tennessee.

Batchelder, R. N., in charge of the general depot of the Quartermaster's Department and disbursing quartermaster at San Francisco, Cal.

Ludington, M. I., chief quartermaster Department of the Platte, Fort Omaha, Omaha, Nebr.

Moore, J. M., Quartermaster-General's Office, Washington, D. C.

Card, B. C., in charge of general depot of the Quartermaster's Department, and office of national cemeteries, Washington, D. C.

Reynolds, C. A., Buffalo, N. Y.

Dandy, G. B., chief quartermaster Department Columbia, Vancouver Barracks, Wash.

Weeks, George H., depot quartermaster, Fort Leavenworth, Kans.

Hughes, W. B., chief quartermaster Department Texas, San Antonio, Tex.

Robinson, A. G., disbursing quartermaster District of Montana, Helena, Mont.

Baker, E. D., depot quartermaster, Saint Louis, Mo.

Lee, J. G. C., chief quartermaster District of New Mexico, Santa Fé, N. Mex.

Gilliss, James, post quartermaster, Fort Monroe, Va.

Eckerson, T. J., depot quartermaster, Boston, Mass.

CAPTAINS AND ASSISTANT QUARTERMASTERS.

McGonnigle, A. J., in charge of depot, New Orleans, La.

Grimes, E. B., on leave of absence. Address, Ebbitt House, Washington, D. C.

Scully, J. W., post quartermaster, Camp Thomas, Ariz.

Howell, W. T., depot quartermaster, Ogden, Utah.

Foster, C. W., depot quartermaster, Baltimore, Md.

Bradley, G. W., Philadelphia, Pa., in charge of transportation.

Belcher, J. H., depot quartermaster, David's Island, New York Harbor.

Kirk, E. B., depot quartermaster, Bismarck, Dak.

Kimball, A. S., Portland, Oreg.

Rockwell, A. F., on detached service, Washington, D. C. In charge of public buildings and grounds in District of Columbia. Address, No. 1700 Pennsylvania avenue N. W.

Smith, G. C., post quartermaster, Fort Lowell, Ariz.

Thomas B., depot and post quartermaster, Fort Union, N. Mex.
 Eg, E. J., on leave of absence on surgeon's certificate. Address, No. 188 Mandeville street, New Orleans, La.
 W, J. V., in charge of depot, Omaha, Nebr.
 With, L. C., on special duty connected with Yorktown Centennial Celebration. Address, No. 1013 H street N. W., Washington, D. C.
 C. H., chief quartermaster Department of West Point, West Point, N. Y.
 A. P., governor of military prison, Fort Leavenworth, Kans.
 Jas. H., depot quartermaster, Cheyenne, Wyo.
 Hall, Jas. M., Detroit, Mich., on duty connected with construction of buildings.
 E. B., depot quartermaster, Columbus Barracks, Columbus, Ohio.
 John, post quartermaster, Fort Clark, Tex.
 L. E., depot quartermaster, San Antonio, Tex.
 A. E., post quartermaster, Fort Brown, Tex.
 Phry, Charles F., depot quartermaster, Presidio San Francisco, Cal.
 James, Charles W., post quartermaster, McPherson Barracks, Atlanta, Ga.
 D. D., depot quartermaster, Yankton, Dak.
 E. B., depot quartermaster, Saint Paul, Minn.
 att, Charles R., awaiting orders. Address, Pennsylvania Military Academy, Chester, Pa.
 anley, Charles A. H., awaiting orders. Address, No. 321 Michigan Avenue, Chicago, Ill.
 ard, Edward B., on temporary duty at general depot, New York City.

CAPTAINS AND MILITARY STOREKEEPERS.

er, R. M., on sick leave. Address, No. 282, Franklin avenue, Brooklyn, N. Y.
 Wood, C. A., Fort Wadsworth, Stapleton, New York Harbor.
 ers, J. F., Philadelphia, Pa.
 G. A., San Francisco, Cal.
 John, Philadelphia, Pa.
 out, Addison, Jeffersonville, Ind.
 da, W. P., Saint Louis clothing depot, Saint Louis, Mo.

List of officers on duty as acting assistant quartermasters, and of the stations at which they have served, during the fiscal year ending June 30, 1881.

Name.	Lineal rank and regiment	Brevet rank	Station.	Time during year on duty as A. A. Q. M.
John Q. Williams	1st Lt. 1st Cav 1st Lt. 12th Inf	Captain	Vancouver, Wash Camp John A. Rucker, Ariz In the field—Department of Arizona.	July 1, 1880, to June 30, 1881 Nov 13, 1880, to Nov 30, 1880 Mar 31, 1881, to Apr 30, 1881
James C. Isaac, jr	1st Lt. Ord Capt. Ord	..	Fort A. Lincoln, Dak Indianapolis Arsenal, Ind	July 1, 1880, to June 30, 1881. July 1, 1880, to June 30, 1881.
George L. Thomas R.	2d Lt. 4th Art 1st Lt. 5th Art	..	Alcatraz Island Cal Key West Barracks, Fla.	July 1, 1880 to June 30, 1881. July 1, 1880, to June 30, 1881.
Robert F.	2d Lt. 8th Inf	..	San Diego Barracks, Cal	July 1, 1880, to June 30, 1881
Albert	1st Lt. 14th Inf	..	Fort Douglas, Utah.	July 1, 1880, to Sept 30, 1880.
Amos A.	1st Lt. 24th Inf	..	Pena Colorado, Tex.	July 6, 1880, to Sept 11, 1880.
H. H.	1st Lt. 18th Inf	..	Cow Island Mont	Aug. 2, 1880 to Nov 30, 1880
John	do	..	Coal Banks, Mont	Apr 30, 1881 to June 30, 1881
William H.	2d Lt. 7th Cav	..	Fort Meade, Dak	July 1, 1880 to Nov 30, 1880, and from Mar 31, 1881, to June 30, 1881
John M.	2d Lt. 5th Art	..	Newport Barracks Ky	July 1, 1880 to Feb. 9, 1881.
Edward L.	1st Lt. 4th Inf	Lt. col	Fort Sanders, Wyo	Dec 5, 1880 to Jan 11, 1881.
Charles A.	1st Lt. 1st Inf	..	In the field—Department of Arizona.	July 1, 1880, to Oct 2, 1880.
Gregory, jr	1st Lt. 10th Inf	..	Fort Wayne, Mich	July 1, 1880, to June 30, 1881.
Charles	1st Lt. 2d Inf	Lt. col	Fort Columbus, N. Y.	July 1, 1880, to Jan 30, 1881
David R.	1st Lt. 15th Inf	..	Fort Bayard N. Mex	July 1, 1880, to Sept. 30, 1880.
Charles M.	1st Lt. 8th Inf	..	Angel Island, Cal	July 1, 1880 to June 30, 1881.
John W.	Capt. 15th Inf	..	In the field—District of New Mexico	July 1, 1880, to Nov 1, 1880.
W. C.	1st Lt. 3d Inf	..	Fort Magnums, Mont	Sept. 12, 1880, to June 30, 1881
John S.	1st Lt. 13th Inf	..	Fort Wingate, N. Mex	July 9, 1880, to June 30, 1881.
Albert S.	2d Lt. 6th Cav	..	Camp Huachuac, Ariz	July 1, 1880, to Apr. 11, 1881.

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1879.

Appropriations, &c.	Appropriations, &c.					
	Regular sup- plies.	Incidental ex- penses.	Horses.	Barracks and quarters.	Army transpor- tation.	Clothing and equipage.
Appropriation for the fiscal year, act approved June 18, 1878.....	\$3, 350, 000 00	\$1, 000, 000 00	\$200, 000 00	\$880, 000 00	\$4, 200, 000 00	\$900, 000 00
Appropriation for the fiscal year, act approved June 20, 1878.....	.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved June 20, 1878.....	.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved February 3, 1879.....	.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved March 3, 1879.....	.....	.....	.....	2, 391 67	.....	.....
Total appropriations for fiscal year.....	3, 350, 000 00	1, 000, 000 00	200, 000 00	882, 391 67	4, 200, 000 00	900, 000 00
Amount expended.....	3, 266, 535 89	996, 583 46	191, 185 99	880, 097 82	4, 200, 000 00	791, 616 79
Amount drawn by Commissary-General of Subsistence.....	.....	.....	.....	.....	.....	.....
Amount carried to surplus fund June 30, 1881.....	83, 464 11	3, 416 54	8, 814 01	2, 293 85	.....	108, 383 21
Balance to credit of appropriations June 30, 1881.....	.....	.....	.....	.....	.....	.....
Aggregate.....	3, 350, 000 00	1, 000, 000 00	200, 000 00	882, 391 67	4, 200, 000 00	900, 000 00
Appropriations, &c.	Appropriations, &c.					
	National ceme- teries.	Hospitals.	Military prison, Fort Leaven- worth.	Pay of super- intendents of national cem- eteries.	Head-stones for graves in pri- vate cemeter- ies.	Military post near the Black Hills.
Appropriation for the fiscal year, act approved June 18, 1878.....	\$100, 000 00	\$75, 000 00	.....	\$59, 000 00	.....	\$100, 000 00
Appropriation for the fiscal year, act approved June 20, 1878.....	.....	.....	\$66, 469 00	.....	.....	.....
Appropriation for the fiscal year, act approved June 20, 1878.....	.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved February 3, 1879.....	.....	.....	.....	.....	\$192, 027 49	.....
Appropriation for the fiscal year, act approved March 3, 1879.....	.....	.....	.....	.....	.....	.....
Total appropriations for fiscal year.....	100, 000 00	75, 000 00	66, 469 00	59, 000 00	192, 027 49	100, 000 00
Amount expended.....	100, 000 00	73, 026 11	41, 681 72	56, 540 98	65, 000 00	99, 994 79
Amount drawn by Commissary-General of Subsistence.....	.....	.....	12, 135 50	.....	.....	.....
Amount carried to surplus fund June 30, 1881.....	.....	1, 973 89	12, 651 78	2, 459 02	.....	5 21
Balance to credit of appropriations June 30, 1881.....	.....	.....	.....	.....	127, 027 49	.....
Aggregate.....	100, 000 00	75, 000 00	66, 469 00	59, 000 00	192, 027 49	100, 000 00

Appropriations, &c.	Military post near northern boundary of Montana.	Macadamized road at Vicksburg, Miss.	Protection of Confederate cemetery on Johnson Island, Ohio.	Erection of barracks at Fort Monroe, Va.	Removing remains of officers to national cemeteries.	Total.
Appropriation for the fiscal year, act approved June 18, 1878.....	\$100,000 00					\$10,984,000 00
Appropriation for the fiscal year, act approved June 20, 1878			\$1,500 00	\$25,000 00	\$5,000 00	97,989 00
Appropriation for the fiscal year, act approved June 20, 1878.		\$7,000 00				7,000 00
Appropriation for the fiscal year, act approved February 3, 1879.....						192,027 49
Appropriation for the fiscal year, act approved March 3, 1879.....						2,391 67
Total appropriations for fiscal year	100,000 00	7,000 00	1,500 00	25,000 00	5,000 00	11,263,388 16
Amount expended	100,000 00	7,000 00		25,000 00	100 00	10,894,363 55
Amount drawn by Commissary-General of Subsistence						12,135 50
Amount carried to surplus fund June 30, 1881.....			1,500 00		4,900 00	229,861 62
Balance to credit of appropriations June 30, 1881						127,027 49
Aggregate	100,000 00	7,000 00	1,500 00	25,000 00	5,000 00	11,263,388 16

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1880.

Appropriations, &c.	Regular supplies.	Incidental expenses.	Horses.	Barracks and quarters.	Army transportation.	Clothing and equipment.	National cemeteries.	Pay of superintendent of national cemeteries.	Hospitals.
Appropriations for the fiscal year, act approved June 23, 1879.	\$3,600,000 00	\$1,000,000 00	\$200,000 00	\$680,000 00	\$4,200,000 00	\$900,000 00	\$100,000 00	\$50,000 00	\$75,000 00
Appropriations for the fiscal year, act approved March 3, 1879. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved February 4, 1879. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved February 25, 1879. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved June 25, 1880. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Appropriation for deficiencies, act approved March 3, 1881. ....	.....	.....	.....	.....	125,000 00	.....	.....	.....	.....
Total appropriations for the fiscal year to June 30, 1881.	3,600,000 00	1,000,000 00	200,000 00	680,000 00	4,325,000 00	900,000 00	100,000 00	50,000 00	75,000 00
Amounts expended and in hands of officers.	3,296,694 48	987,383 86	190,944 81	880,757 40	4,127,385 45	821,134 48	100,000 00	58,571 98	74,309 20
Balance to credit of appropriations June 30, 1881.	303,305 52	12,616 14	9,055 69	19,242 60	197,614 55	78,865 52	.....	428 02	690 80
Aggregate.	3,600,000 00	1,000,000 00	200,000 00	680,000 00	4,325,000 00	900,000 00	100,000 00	50,000 00	75,000 00

Appropriations, &c.	at Fort Monroe.							Total
	Recreation of bat-	Repairs of road	Headquarters t	Rebuilding old	Military post	Remounting from	Military post	
Appropriations for the fiscal year, act approved June 22, 1879								\$11,014,000 00
Appropriations for the fiscal year, act approved March 2, 1879	\$34,000 00	\$6,500 00	\$100,000 00	\$25,000 00	\$40,000 00	\$300 00		206,800 00
Appropriation for the fiscal year, act approved February 4, 1879							\$40,000 00	40,000 00
Appropriation for the fiscal year, act approved February 25, 1879								500 00
Appropriation for the fiscal year, act approved June 25, 1880								50,000 00
Appropriation for deficiencies, act approved March 3, 1881								125,000 00
Total appropriations for the fiscal year to June 30, 1881	34,000 00	6,500 00	100,000 00	25,000 00	40,000 00	300 00	40,000 00	11,435,300 00
Amounts expended and in hands of officers	34,000 00	6,500 00	100,000 00	25,000 00	40,000 00	300 00	30,989 18	10,813,453 68
Balance to credit of appropriations June 30, 1881							10 62	621,846 32
Aggregate	34,000 00	6,500 00	100,000 00	25,000 00	40,000 00	300 00	40,000 00	11,435,300 00

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1881.

Appropriations, &c.	Regular sup- plies.	Incidental ex- penses.	Horses.	Barracks and quarters.	Army trans- portation.	Clothing and equipage.	National ceme- teries.
Appropriated for the fiscal year, act May 4, 1880.....	\$3, 600, 000 00	\$1, 000, 000 00	\$200, 000 00	\$880, 000 00	\$4, 000, 000 00	\$1 000, 000 00	.....
Appropriated for the fiscal year, act approved April 16, 1880.....	.....	.....	.....	.....	.....	.....	.....
Appropriated for the fiscal year, act approved June 8, 1880.....	.....	.....	.....	.....	.....	.....	.....
Appropriated for the fiscal year, act approved June 16, 1880.....	.....	.....	.....	.....	.....	.....	\$100, 000 00
Appropriated for the fiscal year (deficiencies), act approved March 3, 1881.....	.....	15, 260 00	.....	.....	.....	.....	.....
Total appropriations for fiscal year.....	3, 600, 000 00	1, 015, 260 00	200, 000 00	880, 000 00	4, 000, 000 00	1, 000, 000 00	100, 000 00
Amount expended and in hands of officers.....	3, 224, 913 71	1, 005, 695 84	194, 881 32	879, 255 37	3, 983, 326 76	974, 973 65	95, 114 24
Balances in Treasury to credit of appropriations June 30, 1881.....	375, 086 29	9, 564 16	5, 118 68	744 63	16, 673 24	25, 026 35	4, 885 76
Appropriations, &c.	Pay of superin- tendents of national ceme- teries.	Hospitals.	Military post near the Mussel Shell River, Mont.	Construction of headquarters at Fort Omaha, Nebr.	Repair of gov- ernment quar- ters at Fort Monroe, Va.	Military post near the north- ern boundary of Montana (Fort Assina- boine).	Buildings for military head- quarters at San Antonio, Tex.
Appropriated for the fiscal year, act May 4, 1880.....	.....	.....	.....	.....	.....	.....	.....
Appropriated for the fiscal year, act approved April 16, 1880.....	.....	\$75, 000 00	.....	.....	.....	.....	.....
Appropriated for the fiscal year, act approved June 8, 1880.....	.....	.....	.....	.....	.....	.....	.....
Appropriated for the fiscal year, act approved June 16, 1880.....	\$59, 720 00	.....	\$40, 000 00	\$25, 000 00	\$20, 000 00	\$80, 000 00	\$75, 000 00
Appropriated for the fiscal year (deficiencies), act approved March 3, 1881.....	.....	.....	.....	.....	.....	.....	.....
Total appropriations for fiscal year.....	59, 720 00	75, 000 00	40, 000 00	25, 000 00	20, 000 00	80, 000 00	75, 000 00
Amount expended and in hands of officers.....	57, 924 65	74, 950 94	40, 000 00	25, 000 00	20, 000 00	80, 000 00	61, 000 00
Balances in Treasury to credit of appropriations June 30, 1881.....	1, 795 35	49 06	.....	.....	.....	.....	14, 000 00

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1881—Continued.

Appropriations, &c.	Military road between Missoula and Fort Coeur d'Alene, Idaho (Mullan Road).	Road from Fort Scott to the national cemetery, Kans.	Military posts for protection of the Rio Grande frontier.	Macadamized road from Vicksburg to the national cemetery, Miss.	Buildings for military headquarters at Fort Snelling, Minn.	Ringgold Barracks, Tex.	Total.
Appropriated for the fiscal year, act May 4, 1880							\$10,753,000 00
Appropriated for the fiscal year, act approved April 16, 1880			\$200,000 00				200,000 00
Appropriated for the fiscal year, act approved June 8, 1880	\$20,000 00						20,000 00
Appropriated for the fiscal year, act approved June 16, 1880		\$5,500 00		\$8,000 00	\$100,000 00	\$10,538 19	523,758 19
Appropriated for the fiscal year (deficiencies), act approved March 3, 1881							15,260 00
Total appropriations for fiscal year	20,000 00	5,500 00	200,000 00	8,000 00	100,000 00	10,538 19	11,514,018 19
Amount expended and in hands of officers	20,000 00	5,500 00		8,000 00	55,000 00	10,500 00	10,816,036 48
Balances in Treasury to credit of appropriations June 30, 1881			200,000 00		45,000 00	38 19	697,981 71

	514 53	427 60	259,620 75	1,003,020 89	3,988,118 42	1,053,803 74	06,578 58	58,087 65	78 889 45
Rock Island Arsenal	801 52	200 00			14 98				
Watertown Arsenal	565 00	13 35							
Watervliet Arsenal	2,492 84	60 00					40 00		
	2,006 68	257 89			1,050 00				
	973 91	139 05			87 75				
		60 00			800 00				
Total	3,297,162 00	969,394 39	259,620 75	1,003,020 89	3,988,118 42	1,053,803 74	06,578 58	58,087 65	78 889 45

	20,000 00	80,000 00	40,000 00	55,000 00	25,000 00	10,500 00	61,000 00	55,000 00	20,000 00	8,000 00	11,133,295 87
Indianapolis Arsenal											814 87
Kennebec Arsenal											645 00
Rock Island Arsenal											3,840 77
Watertown Arsenal											2,273 48
Watervliet Arsenal											1,833 91
Total	20,000 00	80,000 00	40,000 00	55,000 00	25,000 00	10,500 00	61,000 00	55,000 00	20,000 00	8,000 00	11,133,295 87

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1879.

Appropriations, &c.		Regular sup- plies.	Incidental ex- penses.	Horses.	Barracks and quarters.	Army transpor- tation.	Clothing and equipage.
Appropriation for the fiscal year, act approved June 18, 1878.....		\$3, 350, 000 00	\$1, 000, 000 00	\$200, 000 00	\$880, 000 00	\$4, 200, 000 00	\$900, 000 00
Appropriation for the fiscal year, act approved June 20, 1878.....		.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved June 20, 1878.....		.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved February 3, 1879.....		.....	.....	.....	2, 391 67	.....	.....
Appropriation for the fiscal year, act approved March 3, 1879.....		.....	.....	.....	.....	.....	.....
Total appropriations for fiscal year		3, 350, 000 00	1, 000, 000 00	200, 000 00	882, 391 67	4, 200, 000 00	900, 000 00
Amount expended		3, 266, 535 89	996, 583 46	191, 185 99	880, 097 82	4, 200, 000 00	791, 616 79
Amount drawn by Commissary-General of Subsistence .....		.....	.....	.....	.....	.....	.....
Amount carried to surplus fund June 30, 1881.....		83, 464 11	3, 416 54	8, 814 01	2, 293 85	.....	108, 383 21
Balance to credit of appropriations June 30, 1881.....		.....	.....	.....	.....	.....	.....
Aggregate		3, 350, 000 00	1, 000, 000 00	200, 000 00	882, 391 67	4, 200, 000 00	900, 000 00
Appropriations, &c.		National ceme- teries.	Hospitals..	Military prison, Fort Leaven- worth.	Pay of super- intendents of national cem- eteries.	Head-stones for graves in pri- vate cemeter- ies.	Military post near the Black Hills.
Appropriation for the fiscal year, act approved June 18, 1878.....		\$100, 000 00	\$75, 000 00	.....	\$59, 000 00	.....	\$100, 000 00
Appropriation for the fiscal year, act approved June 20, 1878.....		.....	.....	\$66, 469 00	.....	.....	.....
Appropriation for the fiscal year, act approved June 20, 1878.....		.....	.....	.....	.....	.....	.....
Appropriation for the fiscal year, act approved February 3, 1879.....		.....	.....	.....	.....	\$192, 027 49	.....
Appropriation for the fiscal year, act approved March 3, 1879.....		.....	.....	.....	.....	.....	.....
Total appropriations for fiscal year		100, 000 00	75, 000 00	66, 469 00	59, 000 00	192, 027 49	100, 000 00
Amount expended		100, 000 00	73, 026 11	41, 681 72	56, 540 98	65, 000 00	99, 994 79
Amount drawn by Commissary-General of Subsistence .....		.....	.....	12, 135 50	.....	.....	.....
Amount carried to surplus fund June 30, 1881 .....		.....	1, 973 89	12, 651 78	2, 459 02	.....	5 21
Balance to credit of appropriations June 30, 1881.....		.....	.....	.....	.....	127, 027 49	.....
Aggregate		100, 000 00	75, 000 00	66, 469 00	59, 000 00	192, 027 49	100, 000 00

Appropriations, &c.	Military post near northern boundary of Montana.	Macadamized road at Vicksburg, Miss.	Protection of Confederate cemetery on Johnson Island, Ohio.	Erection of barracks at Fort Monroe, Va.	Removing remains of officers to national cemeteries.	Total.
Appropriation for the fiscal year, act approved June 18, 1878.....	\$100,000 00					\$10,964,000 00
Appropriation for the fiscal year, act approved June 20, 1878.....			\$1,500 00	\$25,000 00	\$5,000 00	97,969 00
Appropriation for the fiscal year, act approved June 20, 1878.....		\$7,000 00				7,000 00
Appropriation for the fiscal year, act approved February 3, 1879.....						192,027 49
Appropriation for the fiscal year, act approved March 3, 1879.....						2,391 67
Total appropriations for fiscal year	100,000 00	7,000 00	1,500 00	25,000 00	5,000 00	11,263,388 16
Amount expended	100,000 00	7,000 00		25,000 00	100 00	10,894,363 55
Amount drawn by Commissary-General of Subsistence						12,135 50
Amount carried to surplus fund June 30, 1881.....			1,500 00		4,900 00	229,861 63
Balance to credit of appropriations June 30, 1881						127,027 49
Aggregate	100,000 00	7,000 00	1,500 00	25,000 00	5,000 00	11,263,388 16

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1890, &c.—Continued.

Appropriations, &c.	at Fort Monroe, Va.							Total
	Recreation of barracks	Repairs of road from Port Monroe to Mill Creek, Va.	Headquarters building at Fort Basil, Tex., Minn.	Rebuilding officers' quarters at Madelon Barracks, New York City's Harbor, N. Y.	Military post near Pagosa Springs, Colo.	Removing remains of Lieut. W. R. King, 18th.	Military post near Nebraska River, North Nebraska, of Dakota.	
Appropriations for the fiscal year, act approved June 23, 1878								\$11,014,000 00
Appropriations for the fiscal year, act approved March 2, 1879	\$34,000 00	\$5,500 00	\$100,000 00	\$25,000 00	\$40,000 00	\$300 00		205,800 00
Appropriation for the fiscal year, act approved February 4, 1879								40,000 00
Appropriation for the fiscal year, act approved February 25, 1879								500 00
Appropriation for the fiscal year, act approved June 25, 1880								50,000 00
Appropriation for deficiencies act approved March 3, 1881								125,000 00
Total appropriations for the fiscal year to June 30, 1881	34,000 00	5,500 00	100,000 00	25,000 00	40,000 00	300 00	50,000 00	11,435,800 00
Amounts expended and in hands of officers	34,000 00	5,500 00	100,000 00	25,000 00	40,000 00	300 00	49,983 34	10,813,453 68
Balance to credit of appropriations June 30, 1881							16 66	321,846 32
Aggregate	34,000 00	5,500 00	100,000 00	25,000 00	40,000 00	300 00	50,000 00	11,435,800 00

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1881.

Appropriations, &c.	Regular sup- plies.		Incidental ex- penses.	Horses.	Barracks and quarters.	Army trans- portation.	Clothing and equipment.	National cem- eteries.
Appropriated for the fiscal year, act May 4, 1880	\$3,000,000 00	\$1,000,000 00	\$200,000 00	\$200,000 00	\$380,000 00	\$4,000,000 00	\$1,000,000 00	
Appropriated for the fiscal year, act approved April 16, 1880								
Appropriated for the fiscal year, act approved June 8, 1880								
Appropriated for the fiscal year, act approved June 16, 1880								\$100,000 00
Appropriated for the fiscal year (deficiencies), act approved March 3, 1881			15,260 00					
Total appropriations for fiscal year	3,000,000 00	1,015,260 00	200,000 00	200,000 00	380,000 00	4,000,000 00	1,000,000 00	100,000 00
Amount expended and in hands of officers	3,224,913 71	1,005,685 84	104,861 32		379,255 37	3,983,336 76	974,973 65	95,114 24
Balances in Treasury to credit of appropriations June 30, 1881	375,086 29	9,564 16	5,118 68		744 63	16,673 24	25,026 35	4,885 76
Appropriations, &c.								
Appropriated for the fiscal year, act May 4, 1880								
Appropriated for the fiscal year, act approved April 16, 1880		\$75,000 00						
Appropriated for the fiscal year, act approved June 8, 1880								
Appropriated for the fiscal year, act approved June 16, 1880	\$59,720 00			\$40,000 00	\$35,000 00	\$20,000 00	\$80,000 00	\$75,000 00
Appropriated for the fiscal year (deficiencies), act approved March 3, 1881								
Total appropriations for fiscal year	59,720 00	75,000 00		40,000 00	25,000 00	20,000 00	80,000 00	75,000 00
Amount expended and in hands of officers	57,624 65	74,950 94		40,000 00	25,000 00	20,000 00	80,000 00	81,000 00
Balances in Treasury to credit of appropriations June 30, 1881	1,795 35	49						14,000

Statement of the appropriations for the Quartermaster's Department for the fiscal year ended June 30, 1881—Continued.

Appropriations, &c.	QUARTERMASTER-GENERAL.					Ringgold Barracks, Tex.	Total.
	Military road between Minn. and Fort Curd d'Alene, Idaho (Mullan Road).	Road from Fort Scott to the national cemetery, Kans.	Military posts for protection of the Rio Grande frontier.	Macadamized road from Vicksburg to the national cemetery, Miss.	Buildings for military headquarters at Fort Snelling, Minn.		
Appropriated for the fiscal year, act May 4, 1880							\$10,755,000 00
Appropriated for the fiscal year, act approved April 16, 1880.			\$200,000 00				200,000 00
Appropriated for the fiscal year, act approved June 8, 1880.	\$20,000 00						20,000 00
Appropriated for the fiscal year, act approved June 16, 1880.		\$5,500 00		\$8,000 00	\$100,000 00	\$10,538 19	523,758 19
Appropriated for the fiscal year (deficiencies), act approved March 3, 1881.							15,260 00
Total appropriations for fiscal year	20,000 00	5,500 00	200,000 00	8,000 00	100,000 00	10,538 19	11,514,018 19
Amount expended and in hands of officers	20,000 00	5,500 00		8,000 00	55,000 00	10,500 00	10,816,036 48
Balances in Treasury to credit of appropriations June 30, 1881			200,000 00		45,000 00	38 19	697,981 71

[illegible]

	20,000 00	80,000 00	40,000 00	55,000 00	25,000 00	10,500 00	61,000 00	55,000 00	20,000 00	8,000 00	11,133,295 87
Indianapolis Arsenal											814 87
Kennebec Arsenal											645 00
Rock Island Arsenal											3,840 77
Watertown Arsenal											2,233 48
Watervliet Arsenal											1,833 91
Total	20,000 00	80,000 00	40,000 00	55,000 00	25,000 00	10,500 00	61,000 00	55,000 00	20,000 00	8,000 00	11,133,295 87

Augusta Arsenal.....	571 50	30 00	.....	125 00	.....	.....	.....
Frankford Arsenal.....	733 74	427 60	.....	50 00	.....	.....	.....
Indianapolis Arsenal.....	.....	157 50	.....	14 96	.....	.....	.....
Kennebec Arsenal.....	792 21	50 00	.....	.....	.....	.....	.....
Rock Island Arsenal.....	595 00	.....	.....	.....	.....	.....	.....
Watertown Arsenal.....	2,492 88	257 89	.....	1,050 00	.....	.....	.....
Watervliet Arsenal.....	1,942 06	139 05	.....	82 25	.....	.....	.....
	973 91	60 09	.....	800 00	.....	.....	.....
Total	3,281,320 77	906,728 28	198,671 75	3,986,471 57	1,053,247 63	95,119 58	57,924 65
						78,401 22	20,000 60

	80,000 00	40,000 00	55,000 00	25,000 00	10,500 00	61,000 00	5,500 00	20,000 00	8,000 00	10,943,239 62
Frankford Arsenal.....										1,211 09
Indianapolis Arsenal.....										202 48
Keokuk Arsenal.....										792 21
Rock Island Arsenal.....										645 00
Watertown Arsenal.....										3,840 77
Watervliet Arsenal.....										2,203 36
Total	80,000 00	40,000 00	55,000 00	25,000 00	10,500 00	61,000 00	5,500 00	20,000 00	8,000 00	1,833 91

Rio, Tex	939 94										939 94		939 94	
	20,500 00										20,500 00		20,500 00	
Ringgold Barracks, Tex.														
amendalized road from Vicksburg														
to national cemetery, Miss														
Total	1,851 90	13 80	10 50	316 84	4,363 35	94,510 88	6,489 37	74,728 81	238,243 98	8,704,308 68	3,003,293 54	12,132,131 60	3,104 77	3,104 77

The following tables exhibit the number of money-accounts and property-returns on hand at the commencement of the fiscal year, the number received and examined during the year, and the number remaining on hand unexamined at the close of the year:

Money-accounts.

	In what calendar year.			Total.
	1879.	1880.	1881.	
On hand July 1, 1880	421	1, 077		1, 498
Received during the year	5	1, 997	1, 297	3, 299
Total	426	3, 074	1, 297	4, 797
Examined during the year	426	2, 637	75	3, 138
Remaining on hand July 1, 1881		437	1, 222	1, 659

Property-returns.

	In what calendar year.			Total.
	1879.	1880.	1881.	
On hand July 1, 1880	258	777		1, 035
Received during the year	47	2, 562	1, 203	3, 812
Total	305	3, 339	1, 203	4, 847
Examined during the year	305	3, 180	401	3, 886
Remaining on hand July 1, 1881		159	802	961

Statement showing the amounts expended by officers in the Quartermaster's Department during and on account of the appropriations for, the fiscal year ending June 30, 1881, and balances in their hands, so far as shown by accounts received at this office.

Names of officers.	Expenditures.	Balances.
Atwood, Capt. E. B., assistant quartermaster	\$46, 086 58	\$4, 884 41
Arnold, Maj. Isaac, jr., Ordnance Department	747 58	
Augur, Lieut. A. A., Twenty-fourth Infantry	100 00	
Austin, Lieut. Albert, Fourteenth Infantry	693 10	
Alligood, Capt. C. A., military storekeeper, Quartermaster's Department	3, 301 54	96 08
Adams, Lieut. T. R., Fifth Artillery	7, 435 96	
Anderson, Lieut. G. L., Fourth Artillery	1, 981 14	
Ames, Lieut. R. F., Eighth Infantry	3, 799 45	
Allen, Lieut. William, Twelfth Infantry	514 95	
Adams, Lieut. J. Q., First Cavalry	62, 100 82	34 33
Ayres, Lieut. J. C., Ordnance Department	304 00	
Anman, Capt. William, Thirteenth Infantry		500 00
Bingham, Lieut. Col. J. D., deputy quartermaster-general	8, 668 25	45, 223 65
Batchelder, Maj. R. N., quartermaster	490, 847 38	33, 440 00
Baker, Maj. E. D., quartermaster	321, 905 21	8, 473 81
Bradley, Capt. G. W., assistant quartermaster	88, 939 95	15, 175 51
Belcher, Capt. J. H., assistant quartermaster	210, 884 59	100 23
Blunt, Capt. A. P., assistant quartermaster	16, 834 42	100 21
Borup, Lieut. H. D., Ordnance Department	127 47	
Bacon, Lieut. G. E., Sixteenth Infantry	27, 932 42	
Baldwin, Lieut. W. H., Seventh Cavalry	20, 568 69	1, 025 73
Brown, Lieut. G. L. R., Eleventh Infantry	2, 208 66	
Brush, Lieut. D. H., Seventeenth Infantry	10, 696 99	374 78
Bell, Lieut. J. F., Seventh Cavalry	15, 448 94	1, 129 51
Bartlett, Lieut. W. C., Third Infantry	5, 009 95	
Boyd, Lieut. O. B., Eighth Cavalry	13, 845 09	401 30
Brant, Lieut. L. P., First Infantry	2, 393 66	
Baxter, Lieut. G. W., Third Cavalry	439 10	
Bird, Lieut. Charles, Twenty-third Infantry	31, 225 52	107 00
Barrett, Lieut. Gregory, jr., Tenth Infantry	11, 947 01	2, 425 31
Baldwin, Lieut. J. M., Fifth Artillery	1, 988 43	

Amounts expended by officers in the Quartermaster's Department, &c.—Continued.

Names of officers.	Expenditures.	Balances.
Lieut. Charles M., Eighth Infantry	\$3,440 57	.....
Capt. Clarence M., Eighth Infantry	705 01	.....
Lieut. A. S., Sixth Cavalry	1,738 01	\$528 00
Lieut. G. B., First Cavalry	7,561 03	3,410 08
Lieut. E. H., Twenty-first Infantry	4,304 12	.....
Lieut. W. C., First Cavalry	541 84	.....
Lieut. H. H., Fourth Cavalry	2,287 29	.....
Lieut. J. W., Fifteenth Infantry	2,110 74	.....
Lieut. D. R., Fifteenth Infantry	3,589 49	.....
Lieut. J. S., Thirteenth Infantry	18,681 79	7,544 23
Lieut. Frank, Ordnance Department	1,160 42	.....
Lieut. Charles, Sixth Infantry	3,801 72	.....
Lieut. H. L., Twenty-first Infantry	82 35	.....
Lieut. W. D., Third Cavalry	3,093 12	.....
Lieut. V. H., Second Artillery	1,312 19	.....
Lieut. E. T., Fifth Artillery	776 26	12 55
Lieut. John, jr., Ninth Infantry	5,408 19	.....
Lieut. L. L., Ordnance Department	710 11	382 90
Lieut. Col. J. G., deputy quartermaster-general	21,245 20	.....
Lieut. B. C., quartermaster	472,475 73	25,750 91
Capt. L. E., assistant quartermaster	119,849 68	51,547 28
Lieut. J. H., Second Cavalry	14,980 95	.....
Lieut. L. W., Third Infantry	15,141 10	.....
Lieut. F. de L., First Infantry	3,111 81	.....
Lieut. T. H., Ninth Infantry	146 79	.....
Lieut. G. P., First Artillery	3,701 08	.....
Lieut. Daniel, Twenty-first Infantry	12,325 82	1,444 62
Lieut. Thomas, Sixth Cavalry	6,393 42	25
Lieut. L. A., Sixth Cavalry	2,391 81	.....
Lieut. E. S., Fourth Artillery	1,858 62	145 04
Lieut. S. E., Second Infantry	12,751 42	167 43
Lieut. W. L., Twenty-third Infantry	5,157 95	.....
Lieut. D. H., Fifteenth Infantry	17,036 87	847 75
Lieut. W. O., Fifteenth Infantry	2,312 77	.....
Lieut. H. G., Thirteenth Infantry	22,235 32	354 11
Lieut. E. S., Second Artillery	663 18	408 10
Lieut. E. H., Second Artillery	2,946 68	.....
Lieut. S. R., Tenth Cavalry	3,791 60	140 66
Lieut. Edward, Seventeenth Infantry	1,576 35	188 50
Lieut. H. D., Twenty-third Infantry	16,887 99	2,104 28
Lieut. Thomas, First Infantry	1,594 90	.....
Lieut. J. R., Twenty-third Infantry	24,182 54	.....
Lieut. W. O., Sixth Cavalry	1,891 85	.....
Lieut. C. J., Twenty-fourth Infantry	2,903 49	642 64
Lieut. B. H., jr., Sixth Cavalry	525 70	1,941 08
Lieut. J. J., quartermaster	47,045 26	3,523 06
Lieut. G. B., quartermaster	272,161 28	39,171 94
Lieut. William, jr., Tenth Cavalry	13,951 87	1 45
Lieut. G. B., Fifth Cavalry	35,257 21	88 00
Lieut. John, Tenth Infantry	2,466 35	.....
Lieut. Edward, Third Artillery	10,917 12	1,317 48
Lieut. C. M., Fifteenth Infantry	11,654 39	.....
Lieut. S. A., Twenty-third Infantry	1,861 28	104 22
Lieut. T. F., Fifteenth Infantry	8,977 75	.....
Lieut. J. W., First Artillery	2,994 84	.....
Lieut. G. E., Second Cavalry	7,006 62	2,910 06
Lieut. F. J. A., Twelfth Infantry	1,893 33	7 70
Lieut. R. H., Sixth Infantry	85 50	.....
Lieut. L. C., Assistant Quartermaster-General	123,993 84	.....
Lieut. Col. J. A., deputy quartermaster-general	211,487 30	66,074 93
Maj. T. J., quartermaster	24,927 34	3,259 71
Lieut. G. H., Tenth Cavalry	1,449 35	.....
Lieut. F. H., First Infantry	4,829 36	.....
Lieut. Oscar, Third Cavalry	7,840 45	.....
Lieut. C. A., Eighth Infantry	875 58	.....
Lieut. F. H. E., Twenty-first Infantry	3,670 31	.....
Lieut. R. T., Ninth Cavalry	7,448 59	.....
Lieut. C. W., assistant quartermaster	28,187 55	139 87
Lieut. J. V., assistant quartermaster	262,897 99	30,017 44
Capt. L. C., assistant quartermaster	15,258 38	.....
Lieut. J. P., Ordnance Department	644 90	.....
Lieut. G. F., Eighth Cavalry	6,396 16	.....
Lieut. Frederick, Fourth Artillery	18 60	.....
Lieut. E. S., Twenty-first Infantry	7,693 55	.....
Lieut. F. S., First Cavalry	7,700 34	11,039 45
Lieut. H. O., Tenth Cavalry	4,306 75	.....
Lieut. E. L., Thirteenth Infantry	974 79	.....
Lieut. James, quartermaster	25,918 97	594 79
Lieut. E. B., assistant quartermaster	289,685 05	.....
Lieut. E. B., assistant quartermaster	783,057 15	66,936 29
Lieut. M. J., Ordnance Department	1,199 08	.....

Amounts expended by officers in the Quartermaster's Department, &c.—Continued.

Names of officers.	Expenditures.	Balances.
Griffin, Lieut. Eugene, Engineer Corps	\$1, 123 54	
Greene, Lieut. C. H., Seventeenth Infantry	3, 618 06	
Getty, Lieut. R. N., Twenty-second Infantry	2, 778 83	
Gibson, Lieut. W. W., Third Artillery	1, 331 13	\$36 80
Gurley, Lieut. C. L., Sixth Infantry	10, 807 23	11 76
Geary, Lieut. W. L., Twelfth Infantry	8, 430 98	
Garlington, Lieut. E. A., Seventh Cavalry	6, 781 03	
Goodwin, Lieut. M. F., Ninth Cavalry	13, 307 83	540 80
Goe, Lieut. J. B., Thirteenth Infantry	15, 138 68	2, 142 01
Guilfoyle, Lieut. J. F., Ninth Cavalry	1, 804 70	85 00
Gayle, Lieut. E. E., Second Artillery	847 53	170 08
Godfrey, Capt. E. S., Seventh Cavalry	2, 299 25	
Gerlach, Lieut. William, Third Infantry	5, 646 52	7, 994 54
Hodges, Lieut. Col. H. C., deputy quartermaster-general	20, 480 25	
Hughes, Maj. W. B., quartermaster	230, 082 10	56, 286 02
Howell, Capt. W. T., assistant quartermaster	12, 471 89	1, 433 40
Hunt, Capt. T. B., assistant quartermaster	134, 602 60	
Hoyt, Capt. C. H., assistant quartermaster	8, 548 09	3, 571 05
Humphrey, Capt. C. F., assistant quartermaster	95, 690 91	10, 278 30
Hathaway, Lieut. F. H., Fifth Infantry	60, 979 16	2, 765 80
Hoyt, Lieut. G. S., Eighteenth Infantry	49, 503 24	280 85
Hoyt, Lieut. R. W., Eleventh Infantry	6, 116 37	453 85
Hinton, Lieut. C. B., Eighteenth Infantry	115 62	
Harwood, Lieut. Paul, Twentieth Infantry	2, 255 40	
Hamner, Lieut. W. H., Twentieth Infantry	185 85	
Hall, Lieut. W. P., Fifth Cavalry	7, 449 29	794 01
Humphreys, Lieut. Charles, Third Artillery	5, 642 61	1, 536 80
Hobbs, Lieut. C. W., Third Artillery	818 64	
Hubbard, Lieut. E. B., Second Artillery	2, 842 37	
Hutton, Lieut. J. A., Fourth Artillery	3, 257 06	
Howe, Lieut. Walter, Fourth Artillery	306 46	
Halloran, Lieut. James, Twelfth Infantry	5, 671 56	1, 044 85
Hurst, Lieut. J. H., Twelfth Infantry	901 05	
Hull, Capt. G. A., military storekeeper, Quartermaster's Department	89, 812 06	1, 125 31
Hall, Lieut. C. B., Nineteenth Infantry	9, 907 56	72 88
Hubert, Lieut. Edgar, Eighth Infantry	4, 388 30	88 78
Hofman, Lieut. W. E., Ninth Infantry	3, 064 72	
Helstand, Lieut. H. O. S., Eleventh Infantry	5, 697 80	506 08
Hoppin, Lieut. C. B., Second Cavalry	26, 678 80	2, 497 41
Howard, Lieut. C. A., Ninth Cavalry	1, 928 20	
Huntington, Lieut. B. D., Second Cavalry	3, 069 95	
Hare, Lieut. L. R., Seventh Cavalry	773 85	
Huston, Lieut. Col. Daniel, Sixth Infantry		82 00
Hoffman, Lieut. William, Eleventh Infantry	981 96	
Ingalls, Col. Rufus, Assistant Quartermaster-General	100, 918 18	9, 222 08
Ingersoll, Maj. E., Ordnance Department	2, 191 26	
Ingalls, Lieut. C. H., Sixth Infantry	9, 265 77	
Jacobs, Lieut. J. W., Seventh Infantry	28, 930 25	375 02
Jones, Lieut. F. B., Third Infantry	18, 207 22	1, 182 85
Jones, Lieut. S. R., Fourth Artillery	1, 862 21	689 74
Jenkins, Lieut. M. J., Fourth Cavalry	2, 776 87	
Kirk, Capt. E. B., assistant quartermaster	53, 788 32	4, 168 11
Kimball, Capt. A. S., assistant quartermaster	39, 828 63	17, 514 21
Krause, Lieut. William, Third Infantry	4, 985 61	183 28
Keefe, Lieut. Joseph, Fourth Infantry	4, 819 16	
Knower, Lieut. E. C., Third Artillery	2, 715 42	
Kelton, Lieut. D. H., Tenth Infantry	1, 984 10	1, 378 34
Kendall, Lieut. H. M., Sixth Cavalry	3, 178 80	
King, Lieut. J. S., Twelfth Infantry	2, 657 90	
Knox, Lieut. T. T., First Cavalry	5, 352 06	
Kinzie, Lieut. G. H., Fifteenth Infantry	3, 766 30	
Kingsbury, Lieut. G. W., Twelfth Infantry	917 05	
Kane, Lieut. J. L., Twenty-fourth Infantry	4, 871 83	408 79
Kendall, Lieut. H. F., Eighth Cavalry	432 55	
Ludington, Maj. M. I., quartermaster	210, 079 93	24, 021 00
Lee, Maj. J. G. C., quartermaster	373, 852 90	24, 315 88
Lord, Capt. J. H., assistant quartermaster	165, 928 88	7, 371 43
Lord, Lieut. T. W., Twentieth Infantry	19, 909 59	2, 636 03
Lloyd, Lieut. C. E., Fourteenth Infantry	1, 900 19	
Lyon, Lieut. M. W., Ordnance Department	126 05	117 13
Leeffe, Lieut. J. G., Nineteenth Infantry	8, 946 17	
Lawton, Capt. H. W., Fourth Cavalry	15, 092 03	
Lester, Lieut. C. H., Eighth Cavalry	3, 144 67	300 79
Leggett, Lieut. H. F., Twenty-fourth Infantry	11, 027 34	
Lovering, Lieut. L. A., Fourth Infantry	1, 336 54	
Myers, Lieut. Col. William, deputy quartermaster-general	182, 179 65	107, 508 08
McGonnigle, Capt. A. J., assistant quartermaster	56, 597 94	8, 268 94
Marshall, Capt. J. M., assistant quartermaster	37, 378 83	
Mlenmore, Capt. A. E., assistant quartermaster	39, 862 88	
Morrison, Lieut. J. T., Tenth Cavalry	3, 632 78	
McClivray, Lieut. John, Second Artillery	26, 660 00	

ounts expended by officers in the Quartermaster's Department, &c.—Continued.

Names of officers.	Expenditures.	Balances.
t. Lieut. Ira, Ordnance Department.....	\$1, 587 34	
Capt. A. S. M., Ordnance Department.....	625 52	\$100 98
Lieut. W. A., Seventeenth Infantry.....	9, 064 35	443 35
Lieut. M. C., Twenty-second Infantry.....	1, 556 70	
Lieut. C. C., Ninth Infantry.....	4, 114 96	
Lieut. T. D., Second Artillery.....	1, 464 05	
Lieut. A. H., First Artillery.....	599 40	
Lieut. J. R., Fifth Artillery.....	845 18	
Lieut. Wallace, Eighth Infantry.....	2, 622 94	223 79
Lieut. S. C., Twelfth Infantry.....	4, 957 17	
Lieut. W. H., First Cavalry.....	21, 902 11	3, 548 75
Serg. Lieut. W. C., Second Infantry.....	1, 315 44	
Lieut. D. N., Fourth Cavalry.....	753 00	
Lieut. C. P., Fourth Artillery.....	590 20	
Lieut. J. F., Ninth Cavalry.....	215 80	
Lieut. D. D., Fifteenth Infantry.....	13, 864 00	200 06
Lieut. Lewis, Fourth Infantry.....	3, 351 54	
Capt. W. P., military storekeeper, Quartermaster's Department.....	16, 325 47	
Lieut. J. A., Fifteenth Infantry.....	3, 266 70	40 00
Capt. H., Ordnance Department.....	3, 750 00	
Lieut. G. H., Third Cavalry.....	3, 013 94	
Lieut. A., First Artillery.....	885 46	
Lieut. J. E., Seventh Infantry.....	1, 143 45	
Serg. Lieut. Col. J., Ordnance Department.....	46 60	3 00
Lieut. Lotus, Second Artillery.....	6, 758 87	
Lieut. John, Sixteenth Infantry.....	22, 883 21	
Lieut. W. A., Twenty-third Infantry.....	418 50	
Lieut. C. R., Ninth Infantry.....	2, 934 77	
Lieut. T. H., Eighth Cavalry.....	12 33	
Lieut. J. J., Fourth Infantry.....	658 82	
Lieut. John, Eighth Infantry.....	3, 706 55	
Lieut. Col. A. J., deputy quartermaster-general.....	107, 880 08	44, 217 43
Lieut. D. C., Second Cavalry.....	11, 313 50	
Lieut. J. R., Twenty-fourth Infantry.....	1, 083 88	258 71
Lieut. G. E., Eighth Cavalry.....	2, 588 68	
Lieut. N. P., First Infantry.....	1, 509 15	
Lieut. W. B., Ninth Infantry.....	5, 578 74	
Lieut. C. D., Fifth Cavalry.....	5, 487 95	220 75
Lieut. R. D., Third Artillery.....	586 46	
Lieut. W. L., Eighth Infantry.....	1, 594 99	
Lieut. J. W., Eighth Infantry.....	153 95	
Lieut. G. H., Fourth Artillery.....	152 85	
Lieut. H. H., Twenty-first Infantry.....	331 50	
Lieut. G. H., Sixteenth Infantry.....	284 20	
Lieut. C. G., Sixth Infantry.....	19, 268 63	
Lieut. S. S., Fifteenth Infantry.....	326 96	
Lieut. E. P., Twenty-third Infantry.....	2, 931 29	
Lieut. A. M., Fourth Cavalry.....	6, 940 23	
Lieut. G. T. T., Fourteenth Infantry.....	2, 892 16	
Lieut. S. C., Fifteenth Infantry.....	4, 259 83	
Capt. C. B., Subsistence Department.....	3, 830 54	
Lieut. Abner, Second Infantry.....	32, 428 23	1, 986 11
Lieut. A. M., Twenty-fourth Infantry.....	9, 088 72	
Lieut. A. R., Fifteenth Infantry.....	322 05	
Lieut. W. R., Fourth Artillery.....	240 90	
Col. D. H., Assistant Quartermaster-General.....	637, 279 78	14, 040 22
S. Maj. C. A., quartermaster.....	20, 490 68	283 52
S. Maj. A. G., quartermaster.....	186, 282 81	20, 273 12
Lieut. Capt. A. F., assistant quartermaster.....	355, 031 37	
Lieut. A. H., Ordnance Department.....	2, 048 45	45 37
Lieut. G. B., Nineteenth Infantry.....	95 65	
Capt. J. F., military storekeeper, Quartermaster's Department.....	125, 185 50	1, 702 54
Lieut. H. J., Fifth Artillery.....	9, 472 14	1, 736 18
Lieut. George, Seventeenth Infantry.....	577 40	
Lieut. H. P., Twenty-fifth Infantry.....	7, 593 43	1, 034 25
Lieut. Daniel, Seventh Infantry.....	5, 019 29	
Lieut. J. M., Eighth Cavalry.....	1, 143 25	
S. Lieut. W. B., Fourteenth Infantry.....	3, 426 46	
Lieut. James, Ninth Infantry.....	5, 868 14	1, 406 19
Lieut. F. S., First Artillery.....	557 56	
Lieut. E. K., First Artillery.....	3, 498 54	50
Lieut. J. M., Twenty-first Infantry.....	9, 360 18	
Lieut. Capt. T. B., Nineteenth Infantry.....	650 12	
Lieut. W. V., Sixteenth Infantry.....	3, 671 52	107 17
Lieut. W. F., Twenty-third Infantry.....	7, 624 18	73 30
Lieut. J. R., jr., Fourth Cavalry.....	8, 413 66	
Capt. W. H., ordnance storekeeper.....	148 20	
Lieut. F. U., Second Cavalry.....	3, 626 20	
Lieut. Alfred, Twentieth Infantry.....	1, 697 13	122 41
Lieut. P. H., Eighth Infantry.....	568 68	
Lieut. S. C., First Cavalry.....	405 08	1, 082 43

Amounts expended by officers in the Quartermaster's Department, &c.—Continued.

Names of officers.	Expenditures.	Balance <i>in</i> <i>ex.</i>
Saxton, Lieut. Col. Rufus, deputy quartermaster-general.....	\$30, 258 05	\$62, 237 38
Sawtelle, Lieut. Col. C. G., deputy quartermaster-general.....	10, 633 03	12, 824 04
Scully, Capt. J. W., assistant quartermaster.....	12, 665 64	568 94
Smith, Capt. G. C., assistant quartermaster.....	104, 176 93	9, 777 99
Simpson, Capt. John, assistant quartermaster.....	12, 085 74	
Scott, Lieut. H. L., Seventh Cavalry.....	2, 149 75	
Sweet, Lieut. O. J., Twenty-fifth Infantry.....	2, 422 00	
Starr, Lieut. C. G., First Infantry.....	681 00	
Simpson, Lieut. J. F., Third Cavalry.....	2, 748 87	
Scott, Lieut. John, Fourth Infantry.....	3, 256 14	
Stivers, Lieut. C. P., Ninth Infantry.....	1, 712 16	
Stiles, Lieut. D. F., Tenth Infantry.....	13, 313 72	
Sellmer, Lieut. Charles, Third Artillery.....	1, 276 66	
Shoemaker, Lieut. F. L., Fourth Cavalry.....	8, 396 76	
Stafford, Lieut. S. R., Fifteenth Infantry.....	3, 737 06	
Sands, Lieut. G. H., Sixth Cavalry.....	4, 491 46	
Shunk, Lieut. W. A., Eighth Cavalry.....	230 10	
Smith, Lieut. Sebree, Second Artillery.....	17, 156 29	
Strother, Lieut. L. H., First Infantry.....	3, 374 98	668 40
Spencer, Lieut. G. K., Nineteenth Infantry.....	4, 522 74	
Strother, D. H., consul-general United States at Mexico City.....	887 91	432 00
Shaw, Lieut. R. G., First Artillery.....	390 09	
Stanton, Lieut. William, Sixth Cavalry.....	1, 511 22	
Scott, Lieut. G. L., Sixth Cavalry.....	6, 711 17	
Sheridan, Lieut. Col. M. V., aide-de-camp to Lieutenant-General.....	265 00	
Stevens, Lieut. R. R., Sixth Infantry.....	38 07	24 20
Sparrow, Lieut. S. E., Twenty-first Infantry.....	48 15	260 77
Shaw, Lieut. J. J., Sixth Infantry.....	3, 949 57	268 72
Tompkins, Col. C. H., Assistant Quartermaster-General.....	111 242 25	24, 018 65
Thomas, Lieut. E. D., Fifth Cavalry.....	29, 873 98	1, 223 56
Thorp, Lieut. Frank, Fifth Artillery.....	4, 330 23	
Tutherly, Lieut. H. E., First Cavalry.....	1, 530 02	
Truitt, Lieut. C. M., Twenty-first Infantry.....	3, 950 31	381 95
Tyler, Lieut. C. R., Sixteenth Infantry.....	246 26	
Taylor, Lieut. A. H. M., Nineteenth Infantry.....	1, 274 64	
Tyler, Lieut. W. W., Ninth Cavalry.....	326 20	130 00
Taylor, Capt. R. M., Twentieth Infantry.....	7, 281 53	6, 728 72
Townsend, Lieut. T. G., Sixth Infantry.....	16 50	
Torney, Assist. Surg. G. H.....	161 50	
Vose, Lieut. W. P., Second Artillery.....	2, 823 32	
Vernon, Lieut. C. A., Nineteenth Infantry.....	117 90	
Valois, Lieut. Gustavus, Ninth Cavalry.....	6, 903 86	
Van Orsdale, Lieut. J. T., Seventh Infantry.....	2, 046 86	22 51
Vogdes, Lieut. C. B., First Infantry.....		1, 402 10
Weeks, Maj. G. H., quartermaster.....	762, 611 25	65, 356 67
Williams, Capt. C. W., assistant quartermaster.....	22, 368 46	324 55
Wheeler, Capt. D. D., assistant quartermaster.....	53, 331 14	5, 417 20
Woodbridge, Lieut. Francis, Seventh Infantry.....	15, 418 89	
Wright, Lieut. G. H., Seventh Infantry.....	575 20	
Woodward, Lieut. S. L., Tenth Cavalry.....	4, 875 11	
Wolf, Lieut. S. A., Fourth Infantry.....	7, 698 08	13 20
Watts, Lieut. C. H., Fifth Cavalry.....	1, 012 19	3 01
Wilson, Lieut. R. H., Eighth Infantry.....	2, 253 73	
Walker, Lieut. G. B., Sixth Infantry.....	2, 997 78	
Wood, Lieut. P. G., Twelfth Infantry.....	2, 914 35	283 65
Ward, Lieut. F. K., First Cavalry.....	4, 979 29	
Wenle, Lieut. T. M., Nineteenth Infantry.....	7, 429 47	
Whital, Lieut. S. R., Sixteenth Infantry.....	4, 375 87	
Wieting, Lieut. O. L., Twenty-third Infantry.....	8, 497 83	
Wilson, Lieut. J. L., Fourth Artillery.....	499 25	51 85
Wittich, Lieut. Willis, Twenty-first Infantry.....	382 58	
Wilson, Lieut. G. S., Twelfth Infantry.....	3, 683 87	
Walker, Lieut. L. H., Fifteenth Infantry.....	7, 627 10	73 17
Willard, Lieut. Wells, Fifth Artillery.....	4, 071 44	
Wessels, Lieut. M. C., Twenty-fourth Infantry.....	2, 688 51	841 83
Wood, Col. W. H., Eleventh Infantry.....	20 50	
Wotherspoon, Lieut. W. W., Twelfth Infantry.....	28, 379 05	20, 284 43
Waltz, Lieut. M. F., Twelfth Infantry.....	984 00	
Winslow, Lieut. Gordon, Eighth Infantry.....	1, 215 67	195 75
Williams, Lieut. C. A., Twenty-first Infantry.....	970 74	273 10
Wolfe, Lieut. Nathaniel, Second Artillery.....	29 45	
Young, Capt. D. J., Ordnance Department.....	1, 679 03	
Total.....	9, 902, 959 82	1, 058, 370 06

Following table exhibits the number of wagons, spring-wagons, harness, &c., on hand at the beginning of the fiscal year ending June 30, 1881, the number purchased, &c., during the year, and the number remaining on hand June 30, 1881, as shown by the returns of the quartermaster's stores received at this office:

Departments.	Army wagons.				Spring-wagons.				Ambulances.			
	On hand July 1, 1880.	Purchased.	Sold, lost, destroyed, &c.	Remaining on hand June 30, 1881.	On hand July 1, 1880.	Purchased.	Sold, lost, destroyed, &c.	Remaining on hand June 30, 1881.	On hand July 1, 1880.	Purchased.	Sold, lost, destroyed, &c.	Remaining on hand June 30, 1881.
the Missouri . . .	896	353	177	861	62	33	3	68	50	...	5	46
Texas	373	...	35	260	39	...	2	36	18	...	3	15
the Platte . . .	470	...	36	316	45	...	3	94	30	...	2	20
Dakota	468	...	28	443	50	...	1	56	43	...	6	34
Arizona	128	1	24	105	12	...	...	11	...	...	...	...
California . . .	143	20	7	90	22	6	1	11	...	...	...	1
the Columbia . .	81	...	6	107	13	...	...	16	...	...	...	6
the South . . .	22	...	4	22	12	...	1	11	...	...	2	6
the East	107	1	3	121	44	1	1	35	8	...	...	13
West Point . . .	14	...	...	15	1	...	...	2	1	...	...	1
...	2,721	375	318	2,340	300	40	12	282	161	...	18	144

Departments.	Wagon harness.				Ambulance harness.				Cart harness.			
	On hand July 1, 1880.	Purchased.	Sold, lost, destroyed, &c.	Remaining on hand June 30, 1881.	On hand July 1, 1880.	Purchased.	Sold, lost, destroyed, &c.	Remaining on hand June 30, 1881.	On hand July 1, 1880.	Purchased.	Sold, lost, destroyed, &c.	Remaining on hand June 30, 1881.
the Missouri . . .	4,094	950	182	4,261	843	...	61	708	84	34	14	87
Texas	2,250	...	859	1,390	594	...	136	400	109	12	16	91
the Platte . . .	2,415	...	284	1,736	626	...	51	465	64	2	6	42
Dakota	2,828	...	313	2,341	434	...	49	371	111	...	...	116
Arizona	826	...	104	694	402	...	44	422	35	...	9	51
California . . .	460	68	23	263	218	...	...	71	60	33	54	64
the Columbia . .	709	20	16	809	97	...	3	192	42	4	3	37
the South . . .	115	...	12	133	55	1	11	73	50	1	11	52
the East	632	4	25	908	1,521	3	6	1,181	129	6	10	89
West Point . . .	6	...	...	20	...	...	...	3	6	...	...	7
...	14,255	1,071	1,618	12,865	4,790	4	361	3,886	689	92	132	636

fuel, forage, and straw issued during the fiscal year ending June 30, 1881, as shown by the returns of quartermasters' stores received at this office.

	Cords	Tons	Bushels
...	4,432	...	...
...	76,875	...	...
...	...	20,006	...
...	...	19,020	...
...	...	37,303	...
...	...	51	...
...	...	2,723	...
...	832,918
...	654,012
...	224,047
...	67,891

Returns have been made to this date of proceeds of sales of quartermasters' property to officers and soldiers of the Army during the last fiscal year, amounting to \$101,500.91.

This amount has been credited to appropriations as follows :

Regular supplies	\$66, 401
Incidental expenses	27
Cavalry and artillery horses	5, 364
Army transportation	522
Clothing and equipage	29, 185
Total	101 500

Very respectfully, your obedient servant,

S. B. HOLABIRD,
*Assistant Quartermaster-General,
 Brevet Brigadier-General, U. S. Army.*

The QUARTERMASTER-GENERAL of the Army.

*Annual report of Col. S. B. Holabird, Assistant Quartermaster-General,
 U. S. A., upon the operations of the clothing branch of the Quartermaster-General's Office, for the fiscal year ending June 30, 1881.*

WAR DEPARTMENT,
 QUARTERMASTER GENERAL'S OFFICE,
 Washington, D. C., September 13, 1881.

GENERAL: I have the honor to submit the annual report of the clothing branch of this office.

The work connected therewith has been principally confined to the purchase and manufacture of clothing, camp and garrison equipage, and clothing materials; to the distribution of the supplies required for the Army from the principal manufacturing depots at Philadelphia, Pa., Jeffersonville, Ind., and San Francisco, Cal.; and to the examination of the accounts of officers responsible for clothing, camp and garrison equipage.

Owing to the lack of appropriations, and the consequent inability of the department to supply clothing at the beginning of the last fiscal year, great and in some cases serious delays have occurred in filling the annual estimates. To illustrate: The chief quartermaster, Military Division of the Missouri, on the 15th day of December last, found himself compelled to telegraph to this office, urging the shipment of only 35 great-coats required for the troops at Fort Reno, Dak. None being surplus at any of the posts or depots under his direction, they were ordered from the Philadelphia depot. Owing to the scarcity of materials, after several days' delay, they were finally sent to their destination by express. Other similar cases have and will to a certain extent occur until the department shall have at last succeeded in laying in a small working stock. It was for this purpose that the Quartermaster-General recommended to the War Department, on the 16th December last, that Congress be asked to grant a special appropriation of \$1,000,000. Although favorably considered by the Secretary of War, Congress failed to grant the appropriation. \$1,100,000 were appropriated for the purchase and manufacture of clothing and equipage for the present fiscal year. Owing to the fact that the last session of Congress was a short one, the department was enabled to advertise for proposals and make contracts immediately upon the passage of the act making the appropriation, thus insuring

deliveries of materials by July 1, thereby enabling the manufacturing depots to fill the requisitions more promptly. This satisfactory arrangement cannot, it is thought, be made when Congress at the summer session fails to make early appropriation.

It is estimated that \$1,444,635.59 will be required for the purchase and manufacture of clothing and equipage for the next fiscal year. This is the exact cost of the articles to which the troops are entitled under existing laws and regulations, based upon the last contract prices. In this connection attention is invited to the following extract from the annual report of Capt. John F. Rodgers, military storekeeper, U. S. A., at the Philadelphia depot, under whose immediate supervision the principal articles of clothing and equipage are procured, inspected, and manufactured. He says:

The Army is being clothed comfortably, cheaply, and creditably. The appropriation should, however, be larger, and if possible should be made available on July 1, 1882. Contracts should be made for the year as early as April or May, to insure deliveries by July 1. Congress would save the taxpayers some money and the Quartermaster's Department much annoyance if this were done.

In these opinions of this experienced officer I fully concur.

The manufacture of the clothing and equipage at our principal depots has been satisfactorily and economically accomplished. Under orders from this office the sewing is principally distributed to female operatives, preference being given to the widows and orphans of deceased Union soldiers.

The system of inspection of all articles purchased is rigidly enforced. In these inspections are also extended to the goods in process of manufacture, advantageous to the government as well as to the contractors, the cause of complaint has been found.

The following new standards have been adopted and distributed to the purchasing and manufacturing depots during the last fiscal year: Unit undershirts, cork helmets, canvas-lined great-coats, and cape-lining annels.

Of specifications, the following have been added and distributed to those heretofore adopted by the Quartermaster-General, viz: Canvas-lined great-coats, conical wall tents, Sibley or conical wall tents, stoves and pipe, dark-blue wool shirting flannel, undershirts, and helmets. Copies of these specifications accompany this report.

All the specifications thus far adopted have been printed of uniform size and bound in books, allowing a margin for those that may hereafter be added. Each officer of the regular establishment of the Quartermaster's Department has been furnished with a copy of this book, thus making every officer acquainted with the requirements of the service as regards clothing, clothing materials, and camp and garrison equipage.

Old pattern clothing to the value of \$29,387.20 has been issued during the last fiscal year to the board of managers of the National Home for Disabled Volunteers under the act of January 23, 1873, as equivalents for 1,334 suits of clothing for which a requisition was made upon this office on the 12th January last.

On the 3d March, 1881, Congress passed a law directing the transfer of the Home referred to of all the old pattern clothing still on hand. Orders to concentrate all this clothing at the principal depots at Philadelphia, Jeffersonville, Saint Louis, and San Francisco, and to transfer to the Home, have been issued. A list of the articles that will thus be transferred will be made part of the next annual report.

Issues of clothing, old and new pattern, to the value of \$5,807.46

were made by this department during the last fiscal year, under authority of the War Department, to destitute citizens, sufferers from the overflow of the Missouri River. The cost of transportation of this clothing from the depot at Saint Louis to the place of issue (Yankton, Dak.) is reported to have been \$1,411.65.

On the 2d February last the Adjutant-General of the Army furnished this office with a copy of a telegram from the Secretary of War to the commanding general Military Division of the Missouri, authorizing the purchase of necessary clothing needed by certain Sioux Indian prisoners, at a cost of not to exceed \$5 for each Indian. The accounts were to be presented to the Interior Department for settlement. On the 17th February last, Capt. W. Clifford, Seventh Infantry, at Fort Buford, Dak., asked for instructions regarding the accountability for certain clothing and equipage turned over to him for issue to Indian prisoners under Special Orders Nos. 5 and 37, Headquarters Fort Buford, Dak. The value of these articles was \$2,784.56. An account was prepared and presented to the Interior Department (through the War Department) for settlement. The Indian Bureau declared itself willing to reimburse the Quartermaster's Department for the value of 400 blankets issued, amounting to \$1,752, as part of the money allotted by that department for the relief of the destitute Indians referred to, but declined to pay the remainder for want of necessary funds.

Upon inquiry, it was ascertained that the money allowed by the Interior Department for this purpose had all been expended. The Secretary of War, on the 6th July last, upon the recommendation of the Quartermaster-General, directed that Captain Clifford be relieved from further responsibility for the property, which orders were carried out on the 15th of that month. The accompanying statement, G, shows articles issued by him, and their cost.

Under the several joint resolutions of Congress, tents and other articles of camp and garrison equipage were loaned to various organizations during the last fiscal year. Statement N shows what articles were issued, the cost to this department of the loss or damage sustained, and the general expenses on account of said loan, amounting in all to \$2,038.31.

By reference to my last annual report it will be perceived that the military prison at Fort Leavenworth, Kans., was indebted to the Quartermaster's Department, June 30, 1880, on account of clothing and equipage issued to the prison in excess of labor performed for the Quartermaster's Department, to the value of \$536.20.

From reports furnished this office by the governor of the prison, it appears that there were issued to the prison by this department during the last fiscal year:

Clothing and equipage to the value of.....	\$11,307 37
Quartermaster's stores to the value of.....	2,011 32
Due the department June 30, 1880	536 20
Total	13,854 89
The value of labor performed for the Quartermaster's Department by the prison during the fiscal year is as follows:	
Clothing and equipage	\$2,319 90
Regular supplies	790 50
Barracks and quarters.....	1,725 50
Incidental expenses	2,051 60
	12,887 50
Leaving the prison indebted to the Quartermaster's Department on the 30th June, 1881, for clothing and equipage, and other stores, issued in excess of the value of labor performed, to the amount of.....	

There were manufactured at the prison during the year on account of clothing and equipage, 34,163 pairs boots; 25,944 pairs shoes; 1,656 bar-
ack chairs, and 4,356 corn brooms. The materials purchased by the
Quartermaster's Department cost, \$137,676.04; the civilian labor, paid
by the Quartermaster's Department cost \$3,800; royalty on machines,
paid by the Quartermaster's Department \$302.49; value of prison labor,
\$7,975.20. The average cost of prison labor in making a pair of shoes
8 cents per pair, of boots 16 cents per pair, of chairs 19 cents each, and
brooms 4 cents each.

The average cost of boots to the department is \$2.90 per pair; of
shoes, \$1.85 per pair; of chairs, \$1.22 each, and of brooms, 16 cents each.
The last prices of boots and shoes purchased by contract after ad-
vertisement were, boots \$2.37½ cents per pair and shoes \$1.86 per pair.
The materials from which the boots and shoes were made were purchased
at the Philadelphia depot of the Quartermaster's Department, under
contract, after advertisement, inspected at that depot by experienced
officers and inspectors, and shipped as fast as received to the Leaven-
worth prison. The leather purchased under these contracts has been
of unexceptional quality.

On the 17th November last the Adjutant-General of the Army advised
this office that, owing to a suspension of work at the prison during part
of the previous fiscal year, on account of the failure of the department
to furnish materials in time, the Secretary of War had approved the
recommendation of the board of commissioners on the prison that the
governor of the prison be charged with the duty of making the pur-
chase of materials for the supplies manufactured at the prison. Since
then purchases have been ordered made as directed.

While upon this subject it should be stated that the delay in shipping
the materials complained of, and which complaint so seriously affects
the administration of this office, was in no way the result of any omis-
sions or negligence on the part of any of its officers or employes. The
department did not have the money to make contracts and supply the
materials at an earlier day. Moreover, there was no immediate need
for any additional boots and shoes at that time. The military prison
has suffered for lack of work, but the troops had all the shoes
and boots needed. There were in depot on the 30th June, 1879, 13,594
pairs of boots and 13,809 pairs shoes; an ample supply. However, every-
thing possible was done to hasten supplies forward after contracts were
made, and thus keep the prisoners employed. As is well known to the
Quartermaster-General, some of the materials were even shipped by ex-
press as soon as received from the contractors. The law requires the
department to make purchases after advertisement, and to make pur-
chases in open market for the only reason of keeping the prisoners
constantly employed would have been unlawful. That the governor of
the prison is now enabled to procure supplies sooner is not due to the
fact that he makes the purchases himself, but to the early passage by
Congress of the appropriation bill enabling the department to advertise
and make contracts before the beginning of the fiscal year.

On the 21st of June last the Adjutant-General of the Army advised
this office that the Secretary of War had approved the recommenda-
tions of the commanding general of the Department of the Missouri and
the governor of the prison that the rates of pay for labor be fixed at
40 cents per day for unskilled and 45 cents per day for skilled labor,
instead of 20 and 30 cents per day as heretofore.

Several complaints having reached this office that some of the boots
and shoes manufactured at the prison were of inferior workmanship,

and specimens showing that such was the fact having been obtained the Secretary of War directed, on the 6th of January last, that a rigid inspection be made at the prison before shipment; that all those rejected, or found defective, be returned to the military prison and charged to the prison clothing account. Instructions to carry out the orders of the Secretary of War have been given.

The statements H to L, inclusive, accompanying this report, give in great detail all the transactions of this department with the prison during the last fiscal year.

Upon request of the Chief Signal Officer of the Army, and in compliance with General Orders No. 35, Headquarters of the Army, of 1881, the articles of clothing and equipage specified in statement O, herewith, were issued by this department to Lieut. A. W. Greely, Fifth Cavalry, acting signal officer, commanding expeditionary force to establish a station at or near Lady Franklin Bay. The appropriation for clothing and equipage for the past fiscal year being almost exhausted, the Secretary of War directed that such articles as were not in depot be purchased from funds appropriated for the Lady Franklin Bay expedition. The following were so ordered purchased: 25 buffalo coats, 50 pairs German socks, 25 buffalo robes, 1 chest carpenter's tools, and 1 set tinner's tools.

Accounts amounting to \$902.97 were received at this office and forwarded to the Third Auditor of the Treasury for settlement. It also appears, from the returns of clothing and equipage on file in this office, that the articles procured for the "Howgate" arctic expedition, specified in Statement O of my last annual report, were turned over to Lieutenant Greely on the 7th December last.

In addition to the articles issued to Lieutenant Greely certain clothing was also furnished to Lieut. P. H. Ray, Eighth Infantry, commanding Point Barrow, Alaska Expedition. The articles are included in Statement O. The commanding general Military Division of the Pacific was also authorized by the Secretary of War, on the 9th June last, to cause the issue to Lieutenant Ray of such quartermaster's and other stores, for sales to officers and men, as may be required for a two years' cruise.

Under the joint resolution of Congress, approved January 28, 1881, all the flags, colors, standards, and guidons on hand at the general depots of the department were sent to this city by the orders of the Secretary of War, and loaned to the Inaugural Executive Committee, J. W. Thompson, chairman, who gave a proper guarantee for the safe return of the property. After the conclusion of the ceremonies a board of survey was convened by Special Orders Nos. 51 and 54, Headquarters Army, 1881, to assess the loss or damage sustained, which was ascertained to amount to \$684.08. Mr. Thompson requested to be relieved from all responsibility for damages by the elements, or, if this was impossible, that the whole matter be suspended until Congress could be appealed to for relief. The Secretary of War on the 16th June last directed that further action be suspended as requested.

Reports upon the serviceability of the 100 pairs each of sewed boots and shoes of the pattern recommended by the Army Equipment Board of 1880, of the improvement by Lieutenant Hobbs for heating tents, and of the camp hatchets and covers submitted by Messrs. Crosby & Co., referred to in my last annual report, have, as yet, not been received.

On the 16th November last the General of the Army referred to this office for report a voluminous petition of officers of the Army, of all arms of the service, for a change in their uniform hat, and asking that hel-

was adopted, similar to those recommended by the Board on Army Equipment, convened by Special Orders, War Department, November 11, 1881. Samples of helmets were prepared at the Philadelphia depot, under the supervision of Capt. John F. Rodgers, military storekeeper, U. S. A., and submitted to the General of the Army, who, on the 13th of December last, directed that a general order be prepared and submitted to the Secretary of War, authorizing officers to wear a helmet in lieu of caps, providing for white summer helmets for all officers, and for the issue of helmets, dark-blue overshirts, and knit undershirts for enlisted men of all arms of the service. After making a careful estimate, it was ascertained that, in order to avoid any increase in the cost of clothing the Army, it would be necessary to modify the existing allowance by omitting the unlined blouse, issuing only 3 overshirts during the first year, and 2 overshirts during the subsequent years of enlistment, and issuing knit shirts at the rate of 3 per year. A general order, to take effect July 1 last, was prepared and submitted to the Secretary of War, who directed its promulgation to the Army. Since these steps have been taken to carry out the provisions of the order, and the necessary articles are now being furnished, except the dark-blue shirts, which, on account of the length of time it will take to procure the large quantity of shirts required to manufacture 75,000 shirts, cannot all be gotten until some time during the coming winter. To prevent suffering from want of these garments, steps have been taken to fill the annual requisition partly with gray flannel shirts, of which a supply is on hand. The old-pattern helmets heretofore issued to mounted troops have been ordered to the Philadelphia depot, where they are being altered to conform to the new style, at a cost of \$6.50 per dozen.

Phototypes of the helmets adopted by the General of the Army have been prepared and issued to the officers of the Quartermaster's Department and to the headquarters of military divisions and departments. A set of these illustrations accompanies this report. Six thousand cork shoes have been procured and issued to troops stationed in hot climates.

In view of the warm character of the soldier's outfit of clothing, as shown by the foregoing change, and taking into consideration that much of cloth and kersey left on hand at the close of the late war have become exhausted, it was thought proper to discontinue the manufacture of extra-lined great-coats. The matter was laid before the General of the Army, who agreed with the Quartermaster-General that the changes in the quantity and quality of under-wear and the issue of lined coats was superfluous. Under existing orders the soldier now wears a half-wool undershirt, an all-wool overshirt, a lined coat, and an excellent great-coat, body and cape lined with the color of uniform of service, woolen mittens, and in severe cold climates a buffalo coat with fur cap and gauntlets. This decision has been promulgated to the Army in General Orders No. 52, A. G. O., 1881.

The supply of buffalo coats and fur caps and gauntlets has been provided for the Army. The prices for the former are quite high, \$14.20 being the cost of those last purchased. This, it is thought, is mainly due to the scarcity of the buffalo, and the time will soon come when coats made of other materials will have to be substituted. A set of handsome silken colors for the headquarters of the Army has been manufactured at the Philadelphia depot, according to designs directed by the General of the Army.

With regard to the scarcity of clothing in depot, the generals commanding military divisions were asked by the Quartermaster-General to aid the

department in returning to the general depots all the surplus not needed for issue during the present fiscal year. It is hoped that this will accomplish the object of preventing the accumulation of unnecessary clothing at posts.

On the 19th November, 1880, Mr. Charles M. Greene, on behalf of the International Chemical Company of New York, requested of the Secretary of War the appointment of a board of officers to examine their vulcanite process for water, moth, and mildew proofing clothing, shoes, and blankets. The Secretary of War, by paragraph II, Special Orders No. 274, A. G. O., 1880, ordered a board of officers to convene in the city of New York. The report of the board not being conclusive, the Secretary of War, on the 8th of March last, directed the expenditure of \$100 in testing the value of the process in protecting cloth, &c., as claimed. The officer in charge of the clothing depot at Philadelphia was directed, on the 12th of March, 1881, to carry out the orders of the War Department.

It having been suggested to the Quartermaster-General by Capt. J. M. Bell, Seventh Cavalry, that the service chevrons be issued gratuitously to the enlisted men, and there being no regulation on the subject of their issue and payment, this office recommended to the Secretary of War that the issue be made as requested, as it would not be right to make a soldier pay for a medal or any decoration of honor and good service. The Secretary of War, August 26, 1880, approved this recommendation. General Orders No. 72, A. G. O., 1880, announces this decision to the Army.

This office was informed on the 18th June, 1881, by the Adjutant-General, of the decision of the General of the Army that the chevrons to be worn by enlisted men for service in campaign, provided for in General Orders 103, A. G. O., 1879, should be identical with the war chevrons, except that it be one-half instead of three-quarters of an inch in width in the aggregate. This decision has been communicated to the chief quartermasters of divisions and officers in charge of general depots of the Quartermaster's Department.

The governor of the State of Missouri having informed the Secretary of War that some of the 500 hospital tents loaned to that State for use of tornado sufferers, referred to in the last annual report, were ready to be returned, this office has recommended that they be sent to the depot at Saint Louis, Mo., and that notification be sent to the Quartermaster-General for record.

In closing this report I desire to call your attention to the fact that there does not now exist any illustrated record of the uniform of the Army. In my opinion there should be such a record in the offices of the Secretary of War, General of the Army, headquarters of military divisions and departments, in this office, in the libraries of the War Department, of Congress, and the Academy at West Point, and at our purchasing and manufacturing depots. Its cost would be trifling, while the corresponding advantages to be derived from such publication would be so great that I urgently recommend that such record be prepared, now that the uniform is complete in all its details. Once established, whenever any radical change is made a new set of records and samples, properly labeled, can be made. Questions frequently arise as to what was the uniform of the Army at a certain period of our national existence, and no satisfactory answer can be given. With an illustrated record, as I propose, there will be no difficulty hereafter.

The work performed by the clothing branch of this office has been accomplished by the same clerical force as during the last fiscal year. The work has been kept up to date.

For further and more detailed information, I respectfully refer to the accompanying statements and inclosures, viz :

A.—Statement showing articles of clothing, camp and garrison equipage on hand at the issuing depots of the Quartermaster's Department June 30, 1880; the quantities purchased, manufactured, received from posts and depots, gained, sold, transferred to other depots and posts, expended, issued to the Army, and the quantities remaining in depot June 30, 1881.

B.—Statement showing remittances on account of clothing, camp and garrison equipage during the fiscal year ending June 30, 1881.

C.—Statement of amounts received and remitted by the Quartermaster's Department on account of clothing, camp and garrison equipage during the fiscal year ending June 30, 1881.

D.—Specifications for clothing, camp and garrison equipage adopted and distributed to officers of the Quartermaster's Department during the fiscal year ending June 30, 1881.

E.—Phototypes of standard helmets adopted by the General of the Army.

F.—Statement showing quantity of clothing, camp and garrison equipage issued to the National Home for Disabled Volunteers, under the act of January 23, 1873, during the fiscal year ending June 30, 1881.

G.—Statement showing articles of clothing, camp and garrison equipage issued to Indians during the fiscal year ending June 30, 1881.

H.—Statement showing articles of clothing, camp and garrison equipage issued to the military prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1881; and money value of the property.

I.—Statement showing articles of quartermaster's stores issued to the military prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1881; and money value of the property.

K.—Statement showing articles of clothing, camp and garrison equipage manufactured at the Military Prison for the Quartermaster's Department during the fiscal year ending June 30, 1881; also cost of materials, labor, &c.

L.—Statement showing value of labor performed for the Quartermaster's Department by the Military Prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1881.

M.—Statement showing quantity of clothing, camp and garrison equipage issued to sufferers from the overflow of the Missouri River during the fiscal year ending June 30, 1881, and estimated money value of the property, and cost of transportation.

N.—Statement of camp and garrison equipage loaned by the Quartermaster's Department to various organizations, under act of Congress, during the fiscal year ending June 30, 1881, and the amounts of damage, loss, &c., sustained by the department.

O.—Statement showing articles of clothing, camp, and garrison equipage issued by the Quartermaster's Department to the Lady Franklin Bay and Point Barrow Expeditions during fiscal year ending June 30, 1881.

P.—Statement of returns of clothing, camp and garrison equipage received and examined, and of letters received and written during the fiscal year ending June 30, 1881.

Q.—Statement of the clerical force employed in the clothing, camp and garrison equipage branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1881.

Very respectfully, your obedient servant.

S. B. HOLABIRD,

Assistant Quartermaster-General, U. S. A.

Brig. Gen. M. C. MEIGS,

Quartermaster-General, U. S. A., Brevet Major-General.

Uniform coats, privates, foot	11,219	202	748	2	490	22	160	8	4,918	7,292
Uniform coats, privates, foot, unmade	14			1	12,210					14
Coat crescents	76		66		211				29	183
Coat castles	984				984					984
Coat shells and flames	1,044		15		1,069				30	1,029
Blouses, lined	24,734	28,776	3,311	75	56,896	57			32,877	23,902
Blouses, unlined	17,607	511	1,195		19,473	120		1,610	11,303	6,449
Blouses, s, lined, unmade		8			8				8	
Stable frocks	8,378	3,864	22	30	12,294	150			4,337	7,807
Overalls, engineers'	5,216				216	4			4	208
Overalls, cavalry and artillery	5,756	7,051			12,807	198			8,298	4,371
Trowsers, mounted, made	7,746	9,834	48		17,028	70			10,057	7,501
Trowsers, foot, made	10,868	22,842	353		34,063	1,101	10		23,263	9,659
Trowsers, mounted, unmade	156	8,410			8,566	26			7,358	1,182
Trowsers, foot, unmade	171	18,254	102		18,587	95			17,447	1,045
Shirts, flannel	48,227	32,412	260		80,899	411			55,527	24,961
Shirts, over, D. B.		18			18			8		10
Shirts, under					60					60
Drawers	73,296	72,648		127	146,071	48,506			81,747	15,818
Drawers, suspensory	105				105					105
Stockings, woolen	12,889		244		146,002	98			144,599	1,307
Stockings, cotton	3,921		5,000	6	58,927	50	5,000		22,045	31,832
Stockings, worsted	658				658				512	146
Socks, German					50				50	
Berlin gloves	141,771		5,343		187,114	22	5,000		102,365	79,727
Mittens, woolen	54		4,110		17,794	7	4,000		19,070	3,717
Gauntlets, fur	247		325		10,346		325		10,013	8
Boots, brass screwed	6,195	34,069	19,121		59,385		14,949		38,416	6,029
Shoes, brass screwed	39,712	25,810	33,741	2	99,265	6	26,595		27,951	44,713
Boots, felt	1				302				300	2
Buffalo overshoes	52		60		112	1				111
Arctic overshoes	3,232		757		11,989	1	750		8,130	3,108
Arctic buck gaiters	1				1					1
Snow shoes	1				1					1
Snow excluders	1				1					1
Leggins	5				5					5
Blankets, woolen	3,716		246		27,156	211		6	24,499	2,440
Blankets, rubber	128,204		8,601		131,805	901			790	130,114
Ponchos	92,977		2,061		95,038	235		6	211	94,592
Chevrons, n. c. s.	814	1,146	36		1,996	14			822	1,160
Chevrons, first sergeants'	1,214	756	66	2	2,065		1		615	1,449
Chevrons, quartermaster sergeants'	38				34					38
Chevrons, sergeants'	6,487	5,249	121		11,857			2	3,565	8,290
Chevrons, corporals'	6,805	4,692	144		11,641			2	3,347	8,292
Chevrons, pioneers'	130				130					130
Chevrons, farriers'	43	86			129				35	94
Chevrons, service	5,815	3,840	421		10,078		15		2,598	7,465
Chevrons service, war	4,648	2,240	378		7,266	2			2,482	4,782
Devices for Signal Corps	612				612				306	306
Trowsers stripes, n. c. s.	182	439	9	1	631			1	511	119

A.—Statement showing articles of clothing, camp and garrison equipage on hand, &c.—Continued.

Articles.	On hand June 30, 1880.	Purchased.	Manufactured.	Received from depots and posts.	Gained.	Total.	Sold.	Transferred to other depots.	Expended.	Issued.	On hand June 30, 1881.
Trowsers stripes, sergeants'..... pairs	507		5,584	117	4	6,202	10			6,207	65
Trowsers stripes, corporals'..... do	740		5,157	128		6,005	8			5,999	108
Bunks, iron..... number	485			2,518		2,983	11	450		2,992	1,540
Bunk slats..... do	1,000	740		1,174	29	3,033			450	1,731	1,842
Bed sacks..... number	25,773		4,285	506	80	31,644	1,997	100		15,400	14,048
Pillow sacks..... do	21,460		7,000	423		28,683	23			2,689	26,273
Bags mosquito..... do	6,983	5,000		2,367		15,336	272			4,327	16,037
Pots iron..... do	373			78		451	18			2	430
Kettles, camp..... do	58,864			527		59,411	22	500	336	1,262	57,201
Pans mess..... do	290,590			131		290,721	33			631	290,007
Axes..... do	4,882	36		355		5,273	33	300		4,935	254
Ax blades..... do	4,217	12,072		1,016		17,305	19			16,154	1,133
Ax slings..... do	21,023			4		22,027	625			26	21,106
Hatchets..... do	35,938			13		56,051	45			570	55,336
Hatchet helves..... do	52,554			213		52,767	137			1,080	51,680
Hatchet slings..... do	18,649			4		18,653	195			31	18,457
Spades..... do	35,100			569		35,669	150			414	35,105
Spade helves..... do	11					11					11
Spade slings..... do	712			2		714				28	686
Shovels..... do	18,589	3,323		1,028		22,900	26	1,000		6,024	15,886
Shovels, long-handled..... do	8					8	8				4
Shovels, scoop..... do	54					54	1		53		
Pickaxes..... do	51,203			90		51,298	201			551	50,541
Pickax helves..... do	38,856			149		39,005	343			5,184	33,478
Pickax slings..... do	1,010			8		1,043				522	611
Drums complete..... do	2,925			78		3,003	3		3	46	2,952
Drum heads, batter..... do	678	112		164		954	201	101		410	243
Drum heads, snare..... do	3,288	13		286		3,585	192	191	2	300	2,900
Drum slings..... do	6,086			45		6,141	303			478	4,160
Drum sticks..... pairs	11,546½			36½		11,583	29			21	11,523
Blank necessaries..... number	9,865			12		9,879	13			6	9,860

Trumpet crooks.....	60	400	110	570	1	101	143	325
Corda and tascala, trumpets and bugles.....	10, 313		111	10, 424	72		2, 086	8, 254
Bugles, with extra mouth-pieces.....	260		17	267	13		126	114
Extra mouth-pieces, bugles.....	36			36				36
Fifes.....	8, 440		26	8, 466	34		66	8, 366
Books, company clothing account.....	7, 820		68	7, 848	27		48	7, 813
Books, company order.....	7, 104		50	7, 164	10		164	6, 980
Books, company descriptive.....	8, 442		174	8, 616			33	8, 583
Books, company morning report.....	9, 239		22	9, 261			1, 068	8, 198
Books, post order.....	4, 126		44	4, 170			42	4, 126
Books, post morning report.....	2			10			2	8
Books, post letter.....	4, 226		20	4, 246	5		66	4, 166
Books, post-guard report.....	2		4	6			2	4
Books, regimental general order.....	1, 045		52	1, 097				1, 096
Books, regimental letter.....	1, 168		20	1, 188			22	1, 166
Books, regimental descriptive.....	1, 893		14	1, 907			7	1, 900
Books, regimental index.....	1, 956		27	1, 983	11		1, 314	1, 655
Books, regimental order.....	1, 930		20	1, 960			52	1, 891
Books, brigade letters received.....	64			64			62	
Books, brigade order.....	9			9	7		2	
Books, brigade letter.....	46		62	108				106
Books, target-practice.....	1, 058		23	1, 081			135	58
Books, inspection.....	32			32				32
Books, indorsement and memoran lum.....	29			29				29
Books, order.....	26			26				26
Books, consolidated morning report.....	3			3				3
Tents, conical wall.....	17	510		527			179	348
Tents, Sibley.....	25	200		225	1		12	212
Tents, hospital.....	2, 381		198	2, 579	90	184	84	1, 585
Tents, wall.....	806	600	45	1, 460	26		2	684
Tents, common.....	2, 505	1, 000	692	4, 197	19	581		1, 681
Tents, shelter.....	813, 072		675	813, 747	710		47, 953	760, 601
Tents, marque.....			1	1			1	
Tents, pyramid.....	4			4				4
Flies, hospital tent.....	957		11	968	33	1	187	206
Flies, wall tent.....	881	600	166	1, 647	4	139	863	641
Flies, marque tent.....				2			2	
Sibley tent stoves.....	114	562	1	677	4		594	79
Sibley tent stove-pipe.....	344	4, 043		6, 546			6, 378	168
Sibley stove-pipe flanges.....	77			77				77
Sibley tent chains.....	4, 000			4, 000			143	3, 857
Poles, hospital tent.....	1, 782		185	1, 967			1, 957	
Poles, wall tent.....	5	300		305			229	
Poles, common tent.....		300		549			549	
Poles, shelter tent.....	20, 158		255	20, 413			846	19, 567
Poles, pyramid tent.....	4			4				4
Poles, Sibley tent.....	14	776		790			167	623
Poles, hospital tent ridge.....	1, 131		24	3, 112	1	185	77	2, 623
Poles, hospital tent upright.....	1, 920		60	5, 804	2	370	154	4, 908
Poles, wall tent ridge.....	1, 121	700	39	2, 089	6			1, 715
Poles, wall tent upright.....	1, 827	1, 400	75	3, 760	12			2, 998
Poles, common tent ridge.....	915	2, 448	320	3, 731	9	266	249	3, 731

A.—Statement showing articles of clothing, camp and garrison equipment on hand, &c.—Continued.

Articles	On hand June 30, 1860.	Purchased	Manufactured	Received from depots and posts.	Collected.	Total	Sold	Transferred to other depots.	Expended.	Issued.	On hand June 30, 1861.
Poles, common tent upright	1, 870	4, 808		640	94	7, 511	14	632	408	662	5, 801
Poles, Bell tent	10					10					10
Tents, Bell	11					11					11
Tent pins, assorted	80, 314	110, 244		30, 450	1, 032	222, 040	2, 757	80, 450	1, 183	100, 705	86, 845
Tent guys	2, 303					2, 303					2, 303
Tent ropes	274				400	743					743
Tent rings, Sibley	9, 080					9, 080					9, 080
Tent tripods, Sibley	2, 017					2, 017					2, 017
Flags, post	277	580		1, 000		1, 857					1, 857
Flags, garrison	242			352		594					594
Flags, storm an recruiting	509	500		270		1, 279					1, 279
Flags, recruiting	160			657		817					817
Flags, designating	351			133		484					484
Flags, post and field hospital	826			104		930					930
Flags, general hospital	97					97					97
Flags signal			6			6					6
Colors, national	447	1		162	3	613	9		10	222	388
Colors, regimental	751	1		485		1, 237	10		43	590	683
Colors, camp	4, 159	8		1, 210		5, 377			6	1, 280	4, 117
Guidons	668			607		1, 275	3		31	665	558
Guidons, ambulance	3, 988					3, 988			1		3, 985
Standards	759		13	477	3	1, 249	2		14	515	709
Streamers	126					126				13	113
Color cords and tassels	1			436		437				4	433
Color cases	1			1		2				2	
Color elings	1, 170					1, 170				4	1, 166
Color belts	672					672				4	670
Color belts and alings	272					272	2			2	268
Color staves	691					691				4	687
Color fringes	4					4					4
Flag-staffs, ambulance	410					410					410
Flag-staffs, hospital and guidon	1, 601					1, 601					1, 601
Guidon, case	334			13		347	81		4	90	213
Rollers, garrison and storm flag	406	606		27		1, 039	23			168	823
Rollers, garrison flag	1, 001			2		1, 003				246	1, 737
Rollers, garrison flag	1, 001	808				1, 809				170	1, 045

number	5,350	5,177	4,500	540	1	8	327
Scrubbing brushes	2,395	14,870	108	20	1	5	25
Scrubbing-brush handles	440			4	1	10	6
Alphabets, 1-inch	20		1	26			31
Alphabets, 2-inch	3			21			11
Alphabets, 3-inch	26			6			6
Numbers, 1-inch	21			31			25
Numbers, 2-inch	6			8,294	21	1,746	327
Numbers, 3-inch	31						
Numbers, 4-inch	438	1,656	1,200				
Barrack chairs							

A.—Statement showing articles of clothing, camp and garrison equipage on hand, &c.—Continued.

MATERIALS, &c.

Articles.	On hand June 30, 1880	Purchased.	Received from de- posits and posts.	Gained.	Total.	Sold.	Transferred to other depots.	Expended.	Issued.	On hand June 30, 1881.
Dark blue uniform cloth, 1	17,799 ¹ / ₂	.....	2,964 ¹ / ₂	104	20,868	31	2,347	2,031	2,231	18,228
Dark blue uniform cloth, 1	50 ¹ / ₂	.....	.....	.....	50 ¹ / ₂	.....	.....	50 ¹ / ₂	.....	.....
Sky blue kersey, 1	24,885	177,833 ¹ / ₂	.....	8,810 ¹ / ₂	208,128 ¹ / ₂	100	77	165,509	2,452 ¹ / ₂	37,790
Sky blue kersey, 1	72 ¹ / ₂	.....	164 ¹ / ₂	8 ¹ / ₂	94 ¹ / ₂	200	6	38	.....	.....
Cloth finishing, 1	3,331	390	500	.....	4,221	4	490	1,353	57	2,307
Cloth Italian, 1	1,577	40 ¹ / ₂	117 ¹ / ₂	.....	1,735	2 ¹ / ₂	115 ¹ / ₂	294	.....	1,323
Flannel, colored, 1	632 ¹ / ₂	16,277 ¹ / ₂	.....	.....	16,910	1 ¹ / ₂	.....	16,908 ¹ / ₂	.....	.....
Flannel, Canton, 1	48,071 ¹ / ₂	129,819 ¹ / ₂	40,046	5,531	223,488 ¹ / ₂	51 ¹ / ₂	12,048	182,438	1,937 ¹ / ₂	46,974
Flannel, dark blue wool, 1	21,515 ¹ / ₂	36,723 ¹ / ₂	7,213	1,779	67,240 ¹ / ₂	71 ¹ / ₂	2,000	59,444	4,274 ¹ / ₂	10,450
Flannel, gray twilled, 1	24,480 ¹ / ₂	75,902 ¹ / ₂	14,023	5,315	119,721	171	13,709	77,979	1,730	26,192
Flannel, shirting, light, 1	.....	58,447 ¹ / ₂	.....	.....	58,447 ¹ / ₂	.....	.....	13,079 ¹ / ₂	315	45,053
Flannel, shirting, heavy, 1	12,623	83,048 ¹ / ₂	18,489	.....	109,341 ¹ / ₂	.....	.....	66,271	415 ¹ / ₂	42,855
Flannel cape lining, 1	52 ¹ / ₂	3,393	257 ¹ / ₂	.....	3,603	.....	.....	3,672	21	9
Flannel red, 1	9	.....	.....	.....	9	.....	.....	.....	.....	.....
Muslin unbleached, 1	208,205	8,000	33,373	2,245	249,823	.....	27,731	49,119	.....	172,973
Drilling, 1	44,483	.....	1,918	.....	46,401	.....	.....	.....	.....	46,401
Linon, brown, 1	639 ¹ / ₂	.....	.....	.....	639 ¹ / ₂	.....	.....	.....	.....	.....
Padding, 1	5,475 ¹ / ₂	90,406	15,530 ¹ / ₂	.....	51,414	1 ¹ / ₂	.....	32,035 ¹ / ₂	.....	19,377
Black silk, 1	5,145	9,745 ¹ / ₂	0,740 ¹ / ₂	1,882	23,323	10 ¹ / ₂	6,096	8,454 ¹ / ₂	500	8,363
Corset jeans, 1	14 ¹ / ₂	51 ¹ / ₂	600	.....	666 ¹ / ₂	.....	.....	31 ¹ / ₂	.....	635
Loose, 1-inch, 1	78 ¹ / ₂	.....	2 ¹ / ₂	.....	80 ¹ / ₂	54 ¹ / ₂	.....	.....	.....	28
Coat facings, 1	119	.....	.....	.....	119	.....	.....	40	.....	79
Trimnings for trousers, 1	28	.....	72	.....	100	.....	.....	100	.....	.....
Saddle pieces for trousers, 1	.....	.....	22	.....	32	.....	.....	32	.....	.....
Braid, worsted, 1	9,716 ¹ / ₂	.....	465	.....	10,181 ¹ / ₂	.....	450	344 ¹ / ₂	45	9,343
Cord, worsted, 1	63,916	71,100	25,100	3,834	163,950	.....	25,100	36,100	.....	100,750
Wadding, 1	47,877	.....	730	.....	48,607	4	730	908	.....	46,865
Tape, 1	16,947	340,976	127,680	.....	485,603	.....	127,680	256,108	.....	91,814
Bookies, gilt, 1	28,841	48,562	100	.....	78,403	.....	.....	50,584	.....	18,909
Blay binding, 1	1,416	.....	.....	.....	1,416	.....	.....	78	.....	1,337
Hooks, 1	8,513	32,976	175,546	.....	215,035	.....	7,634	34,380	.....	173,651
Eyes, 1	5,453	33,976	164,346	.....	207,785	.....	7,604	34,380	.....	165,821
Buttons, 1	3,094	.....	1,170	.....	3,270	.....	900	2,340	.....	230
Buttons, 1	31,789	.....	640	.....	32,429	.....	628	1,800	.....	29,778
Buttons, 1	12,261	1,340	548	.....	14,149	.....	.....	8,901	.....	2,709

Silk, sewing	4, 326	402	4, 728	.....	449	.....	.....	.....	.....
Silk, sowing	108	.....	238	.....	102	.....	.....	.....	.....
Silk, twist	604	27	155½	.....	96½	.....	.....	.....	.....
Cotton thread.....	72, 975	58, 261	144, 196	.....	61, 197	.....	.....	.....	.....
Cotton thread	41	.....	41	.....	.....	.....	.....	.....	.....
Linen thread	4, 961½	325	6, 938½	.....	2, 583½	.....	.....	.....	.....
Linen thread	265	.....	265	.....	256	.....	.....	.....	.....
Tailor's crayons.....	132	.....	378	.....	155	.....	.....	.....	.....
Webbing	478	5, 040	10, 558	.....	8, 383	.....	.....	.....	.....
Cotton duck, blue	112	.....	15, 382½	.....	11, 535	.....	.....	.....	.....
Bunting	70	.....	70	.....	7	.....	.....	.....	.....
Cords and tassels, coat.....	.....	.....	5, 000	.....	5, 000	.....	.....	.....	.....
Line, tent.....	46	.....	1, 255½	.....	1, 183	.....	.....	.....	.....
Buckles, tent.....	26	.....	26	.....	26	.....	.....	.....	.....
Straps, tent.....	5, 202	.....	5, 202	.....	.....	.....	.....	.....	.....
Chains, tent.....	5, 281	1, 000	1, 281	.....	788	.....	.....	.....	.....
Rings, tent.....	105	1, 000	1, 105	.....	710	.....	.....	.....	.....
Rings, galvanized	337	.....	49, 577	.....	49, 577	.....	.....	.....	.....
Sockets, tent	2	42	118	.....	.....	.....	.....	.....	.....
Duck, tent	7, 076	.....	66, 558½	.....	68, 380½	.....	.....	.....	.....
Rope, cotton	4	.....	951	.....	901	.....	.....	.....	.....
Rathine	26½	.....	963½	.....	963½	.....	.....	.....	.....
Twine, cotton	6, 598½	.....	7, 222½	.....	653½	.....	.....	.....	.....
Rope, tent.....	274	.....	743	.....	.....	.....	.....	.....	.....
Slips, tent.....	46, 794	.....	46, 794	.....	8, 645	.....	.....	.....	.....
Buttons, tent.....	9, 825	.....	9, 825	.....	.....	.....	.....	.....	.....
Grommets, brass	.....	.....	6, 840	.....	.....	.....	.....	.....	.....
Beeswax.....	32½	.....	220	.....	6, 824	.....	.....	.....	.....
Gum, tragacanth	100	100	200	.....	210	.....	.....	.....	.....
Wax, hard	25	500	1, 025	.....	525	.....	.....	.....	.....
Wax, liquid.....	2½	106	214½	.....	102½	.....	.....	.....	.....
Epsom salts	50	.....	50	.....	50	.....	.....	.....	.....
Rye flour	955	.....	1, 755	.....	1, 605	.....	.....	.....	.....
Glue	277	.....	377	.....	295	.....	.....	.....	.....
Oil, palm	2	.....	2	.....	2	.....	.....	.....	.....
Oil, sperm	100	100	200	.....	100	.....	.....	.....	.....
Oil, neatsfoot.....	10	.....	10	.....	10	.....	.....	.....	.....
Oil stones	12	48	108	.....	16	.....	.....	.....	.....
Oil cups	16	60	136	.....	14	.....	.....	.....	.....
Acid, oxalic	65	.....	115	.....	65	.....	.....	.....	.....
Turpentine	40	40	80	.....	36	.....	.....	.....	.....
Dressing, shoe.....	14	210	434	.....	224	.....	.....	.....	.....
Ink, burnishing	77	.....	297	.....	223	.....	.....	.....	.....
Ink, indelible.....	.....	.....	5	.....	2	.....	.....	.....	.....
Ink, writing.....	.....	12	24	.....	13	.....	.....	.....	.....
Paper, sand	.....	300	6 0	.....	282	.....	.....	.....	.....
Paper sand.....	382	600	1, 617	.....	659	.....	.....	.....	.....
Paper, petroleum	4, 598	36, 948	41, 546	.....	17, 442	.....	.....	.....	.....
Paper, wrapping	840	121	961	.....	260	.....	.....	.....	.....

A.—Statement showing articles of clothing, camp and garrison equipage on hand, &c.—Continued.

MATERIALS, &c.—Continued.

Articles.	On hand June 30, 1880.	Purchased.	Received from depots and posts.	Gained.	Total.	Sold.	Transferred to other depots.	Expended.	Issued.	On hand June 30, 1881.
Paper, pattern.....	110	.....	.....	.....	110	.....	.....	110	.....	.....
Tags.....	1,000	2,500	.....	.....	3,500	.....	.....	2,500	.....	1,000
Tickets, clothing.....	.....	71,000	.....	.....	71,000	.....	.....	71,000	.....	.....
Board, pattern.....	100	.....	.....	.....	100	.....	.....	100	.....	.....
Twine, flax.....	104	110	110	.....	324	.....	110	78	.....	136
Brushes, ink.....	5	60	36	.....	101	.....	60	36	.....	5
Sponges.....	.....	6	6	.....	124	.....	6	64	.....	.....
Tent cord.....	761,077	.....	.....	.....	761,077	.....	.....	111,115	.....	649,962
Leather, russet.....	3154	.....	.....	.....	3154	.....	.....	3154	.....	.....
Leather, wax upper.....	28,6354	352,9194	352,9204	.....	734,4754	.....	352,9204	329,999	101	61,645
Leather, sole.....	51,0814	137,522	137,7804	.....	326,4844	.....	137,7804	149,5664	.....	39,1374
Leather, counter.....	529	7,521	7,522	.....	15,5724	.....	7,522	5,5514	.....	2,499
Nails, American.....	1,640	2,700	2,700	.....	7,040	.....	2,700	2,880	.....	1,460
Nails, Swedish.....	5,016	7,300	7,300	.....	19,610	.....	7,300	5,786	.....	6,524
Thread, shoe.....	183	928	928	.....	2,039	.....	928	794	.....	317
Tacks, lasting.....	1,342	1,500	1,500	.....	4,342	.....	1,500	1,467	.....	1,375
Tacks, lasting.....	9	100	100	.....	209	.....	100	101	.....	8
Sheepskin skivers.....	26,218	41,1604	41,4764	.....	108,8554	.....	41,4764	42,850	.....	24,5284
Wire, screw.....	2,681	5,500	.....	.....	8,181	.....	.....	6,235	.....	1,946
Chalk.....	15	19	.....	.....	34	.....	.....	24	.....	10
Pins.....	9	.....	.....	.....	9	.....	.....	4	.....	5
Awls, assorted.....	344	1184	1184	.....	2714	.....	1184	1134	.....	3814
Awl hafia, assorted.....	84	8	8	.....	244	.....	8	124	.....	44
Needles, assorted.....	534	171	161	.....	8904	.....	166	171	.....	534
Broom corn.....	.....	10,000	.....	.....	10,000	.....	.....	10,000	.....	.....
Broom twine.....	.....	75	.....	.....	75	.....	.....	75	.....	.....
Broom wire.....	.....	280	.....	.....	280	.....	.....	280	.....	.....
Broom handles.....	.....	5,000	.....	.....	5,000	.....	.....	4,360	.....	644
Barrack chair arms.....	.....	110	.....	.....	110	.....	.....	110	.....	.....
Barrack-chair rungs.....	.....	100	.....	.....	100	.....	.....	100	.....	.....
Barrack-chair bolts.....	.....	220	.....	.....	220	.....	.....	220	.....	.....
Lumber, beech.....	.....	500	.....	.....	500	.....	.....	500	.....	.....
Lumber, hickory.....	.....	1,600	.....	.....	1,600	.....	.....	1,600	.....	.....
Lumber, poplar.....	14,400	.....	.....	.....	14,400	.....	.....	14,400	.....	.....
Lumber, oak.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mussey powder.....	2,850	13,000	.....	.....	15,850	.....	.....	15,850	.....	.....
.....	14	.....	.....	.....	14	.....	.....	14	.....	.....

Brushes, button	2						2
Brushes, button			1				1
Machines, sewing	4						4
Machines, sole-cutting	1						1
Machines, rolling	1						1
Machines, splitting	2						2
Machines, stripping	1						1
Machines, sole-moulding	1						1
Machines, sand-paper	1						1
Machines, counter	1	1					2
Machines, shank	1						1
Machines, wax-thread	2	1					3
Machines, beveling	1						1
Machines, heel-filling	1						1
Machines, heel-breasting	1						1
Machines, burnishing	1						1
Machines, siding	2						2
Machines, turning	1	1					3
Machines, side-welt	1	1					3
Machines, strap-hole	1						1
Machines, tying	4						4
Machines, measuring	4						4
Machines, cloth-testing	5						5
Machines, steel-die	1						1
Machines, cloth-sponging	1						1
Machines, cloth-cutting	1						1
Machines, band-knife	1						1
Baling-presses	17						17
Lathe, complete	1						1
Fixtures, machine	4						4
Sewing-presses	4						4
Sewing-cuffs	12						12
Screw-clamps	136						136
Lay figures	33						33
Cutters		8					8
Knives, assorted	324	744					1,740
Knives, band	3				672		3
Knives for machine		1			1		2
Knives, carriage-slide		1			1		2
Knives, block		1			3		4
Knives and plates		4					4
Knives, blade and holders	12						12
Knives, ripping	1						1
Clamps, band-knife	24						24
Band-saw	1						1
Files, assorted	148	96			96		340
Files, shoe	19						19
Boot-crimping boards	6						6
Boot-trees	30						30

A.—Statement showing articles of clothing, camp and garrison equipage on hand, &c.—Continued.

MATERIALS, &c.—Continued.

Articles.	On hand June 30, 1880.	Purchased.	Received from de- pots and posts.	Gained.	Total.	Sold.	Transferred to other depots.	Expended.	Issued.	On hand June 30, 1881.
Boot-seam rubbers..... number	1		1		2					1
Boot-crimping forms..... pairs	150		250		400			40		360
Boot-trees..... sets	3				3					3
Boot-trees, automatic..... number	1		3		4					4
Boot-trees, automatic table..... do	1				1					1
Cloth-holders..... do	4				4					4
Cloth-weights..... do	6				6					6
Crank..... do	1				1					1
Clamps..... do	3				3					3
Crimping-breaks..... do	2	8	3		8		3			3
Crimp-screws..... do	100				100					100
Crimping shoe-jacks..... do	10				10					10
Cutting-blocks..... do	1				1			1		
Crispin hammers..... do	54		144		198			8		190
Cloth-beams..... do	1				1					1
Cutters' tables..... do	28				28					28
Cloth-cutting blades..... do	69	12			81	24		12		45
Baskets..... do	2				2					2
Boxes, patent..... do	9				9					9
Blades, perine..... do	2				2					2
Buffer steels..... do	3				3	2				
Books, text..... do	25				25			1		2
Chase skiving-machine..... do		1			1					25
Dies, assorted..... do	40	14			54					1
Dies, counter..... do	2				2					54
Dies, beel..... do	3				3					2
Edge-planes..... do	37	12			49					3
Edge-shaves..... do	12				12					49
Edge planes and pressers..... do		72			72					12
Drivers for heelers..... do		100	100		200		100	100		72
Figurica, steel..... sets	1	1	1		3		1			2
French wheel..... do	3				3					3
Glass and rosewood cases..... number	3				3					3
Goose-irons..... do	4				4			1		3
Ham-balls..... do	30	308	288		612		288	308		24
Heel-shaves..... do	10	144	144		254		144	102		108

Iron lasts	do.	12	1	1	57	14	12
Iron bedsteads	do.	57					
Jack-posts	do.	1					1
Jacks, lasting	do.	15	6				21
Jacks, healing	do.	3					3
Jacks, oxbow	do.	3					3
Lasts, calf-boot	do.	4					1
Last-hooks	do.	3					2
Lasts	pairs.	259½	50	50			102
Lamps, kit	number.	18	36				9
Nippers, wire	do.		3	3			3
National cast-offs	dozen.		1				
Napmeter	number.						1
Microscopes	do.	1					2
Magnifying-glasses	do.	2					3
Pincers, shank	do.	3					
Pincers, lasting	do.	41	120				100
Peg-floats	do.	62	108				121
Pressers, edge	do.	3					3
Pressers, shoe	sets.	10					10
Pliers	number.	2					2
Punches	do.		3	3			3
Rope, manila, ½-inch	pounds.	5			2		
Rebblings for mallets	number.	46, 449					43, 704
Raw-hide mallets	do.	5	36				8
Rivets, bunk	do.		102				107
Studs, bunk	do.		3, 576				
Shears	do.	11	3, 576				
Scissors	do.						11
Seals, C and G	do.	2					
Sewing-bristles	pounds.	2					2
Squares	number.		2				4
Sticks, pants	do.	4					1
Sticks, size and colt	do.	1					1
Sticks, shoulder	do.	1	6				1
Sticks, long	do.	1					1
Skivers	do.	7					7
Sandstones	do.	3					3
Strip-cutters	do.	2					
Sets hook and eyelet	do.	2					2
Steel stamps	do.	6					
Screws	gross.	32	49				35
Sad-irons	number.	9					9
Scales, chemists'	do.	1					1
Scales, silk	do.	1					1
Scales, testing	do.	1					1

et showing remittances on account of clothing, camp and garrison equipage during the fiscal year ending June 30, 1881.

vision of the Atlantic.....	\$126 69
vision of the Missouri.....	13,131 27
vision of the Gulf.....	5 00
vision of the Pacific.....	403 88
ashington, D. C.....	3 00
iladelphia, Pa.....	760,943 61
ew York.....	157 15
ffersonville, Ind.....	107,058 52
n Francisco, Cal.....	165,379 94
son at Fort Leavenworth, Kans.....	6,038 57
l.....	1,053,247 63

ectfully submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.,
PARTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

nt of amounts received and remitted by the Quartermaster's Department on account ng, camp and garrison equipage, during the fiscal year ending June 30, 1881.

by Congress.....	\$1,000,000 00	Remitted for purchase and manufac-	
Treasury, credited to		ture of clothing and equipage.....	\$1,053,247 63
on for clothing and equi-		Balance in Treasury June 30, 1881,	
.....	78,273 98	and due on contracts not yet com-	
		pleted	25,026 35
.....	1,078,273 98	Total.....	1,078,273 98

fully submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.
RTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

ations for clothing, camp and garrison equipage adopted and distributed to the Quartermaster's Department during the fiscal year ending June 30, 1881.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR GREAT COATS, CANVAS LINED.

-To be according to pattern, with two (2) outside pockets and a waist belt, of two (2) sizes corresponding to the Regulation great coats of sizes 3

—The outside to be of cotton duck weighing nine and one-half (9½) ounces re yard, dyed blue to the shade of standard sample. The inside or lining my standard twenty-two (22) ounce ¾ sky-blue kersey. The cords and of blue worsted according to pattern—one for the neck to be sixty (60) and two (2) for the hood to be each forty-two (42) inches long; the latter ed at the outer edge of neck and drawn at the center of the hood or cape. ubber buttons on front and two (2) on belt, as on sample.
August 18, 1880.

M. C. MEIGS,
Quartermaster-General, Bvt. Maj. Gen'l, U. S. A.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR CONICAL WALL TENT.

Material.—Body of tent to be of standard twelve (12) ounce cotton duck, and sod cloth of standard eight (8) ounce cotton duck, twenty-eight and one-half ($28\frac{1}{2}$) inches wide; eave lines of six (6) thread manila line (large), and foot lines of six (6) thread ratline line.

Work.—To be made in a workmanlike manner, with not less than two and a half ($2\frac{1}{2}$) stitches of equal length to the inch, made with double thread of five-fold cotton twine well waxed.

The seams not less than one (1) inch in width, and no slack taken in them.

Form and dimensions.—The roof to be in the form of a frustum of a cone, seventeen and a half ($17\frac{1}{2}$) feet in diameter at the base, eighteen (18) inches in diameter at the top. Wall to be two (2) feet high. Height when pitched: to top of roof, twelve (12) feet; to top of pole, thirteen (13) feet and six (6) inches. Eaves to be two (2) inches wide, and tabling at bottom two and a half ($2\frac{1}{2}$) inches wide.

Top.—The opening at top to be formed with a galvanized-iron ring eighteen (18) inches in diameter, over which the duck shall be firmly stitched and reinforced down the roof to a depth of twelve (12) inches. Six (6) grommets, five-eighth ($\frac{5}{8}$) inch holes, to be made around top at equal distances just below the ring, in which to hook the chains which support the tent on pole.

The chains and hooks, six (6) in number, to be about twenty (20) inches long, and to be fastened in a circular iron plate properly bored for the pole spindle. All to be of malleable iron, galvanized.

Door.—Doorway to be eight (8) feet and six (6) inches high (measured along the seam), eleven and a half ($11\frac{1}{2}$) inches wide at top, and twenty-five and a half ($25\frac{1}{2}$) inches wide at bottom.

The doors of two pieces equal in area to the doorway, and joined at opposite sides of the same, so as to lap and form double thickness when closed.

Door fastenings.—Door fastenings to be the same as described for Sibley tents, except that there be five on each side.

Sod cloth.—The sod cloth to be nine (9) inches in the clear in width and to extend around the inside of tent from door to door.

Grommets.—Grommets at top, six (6) in number, to be made with tarred rope and cotton twine well waxed, and be faced with stout leather. Those in the eaves, twenty-four (24) in number, to be made over malleable iron half ($\frac{1}{2}$) inch rings with cotton twine well waxed, and those in tabling at bottom of wall, twenty-four (24) in number, to be made over malleable iron five eighths ($\frac{5}{8}$) inch rings with cotton twine well waxed. All grommets to be worked in the seams.

Hood.—Hood to be as described for Sibley tent.

Eave lines.—Eave lines, twenty-four (24) in number, to be six (6) thread manila line (large), and be four (4) feet and six (6) inches long in the clear. To be spliced in the eaves and the ends properly whipped, and each line to be furnished with a wooden slip of Army standard.

Foot lines.—Foot lines to be as described for Sibley tents.

Hood lines.—Hood lines to be as described for Sibley tents.

Pole.—Pole to be as described for Sibley tents.

Tripod.—Tripod to be as described for Sibley tents.

Pins.—Forty-eight (48) wooden pins; twenty-four (24) to be of the small size described for hospital tents, and twenty-four (24) to be of the size described for common tents, and to be according to standard.

The manufacturer should cut his cloths as though designed for a height of eleven (11) feet and six (6) inches, instead of twelve (12) feet. This is found to be necessary owing to the fact that the tent stretches after a few days' use, particularly in dry weather.

If the duck be cut for full twelve (12) feet in height, it will necessitate propping up the tripod to the extent of about six (6) inches.

Adopted November 5, 1880.

M. C. MEIGS,
Quartermaster-General, Bvt. Major General, U. S. A.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR SIBLEY OR CONICAL WALL TENT STOVES AND PIPE.

Stove.—The stove to be in the form of the frustum of a cone, and to be made of No. 15 (American gauge) common annealed plate iron. To be in one piece (except the

door), and the seam at back to be fastened with twenty-four (24) rivets. at top to be of the same material as the stove. To be two and a half (2½) p, and be secured to the stove by six (6) rivets. Aperture for door to be (6) inches high by six (6) inches wide, the upper corners of which shall be s in sample. The door to be sufficiently large to lap over the aperture; irectly hinged to the stove, and to be properly molded to its form. An d vent at the bottom of stove directly under the door, about two (2) inches ree (3) inches wide; the top to be rounded.

on and weight.—Height to top of collar, twenty-eight (28) inches. Circum- outside) at bottom, fifty-eight (58) inches; at top, thirteen (13) inches. rom bottom of door aperture to base of stove, fourteen (14) inches. Weight steen (19) pounds (to average not less than this).

he pipe to be of No. 24 (American gauge) refined sheet-iron. Length of enty-four (24) inches. Circumference (outside) at bottom, thirteen and a 3½) inches; at top, twelve and three-quarters (12¾) inches. To have four quidistant in each joint, one and a half (1½) inches from the widest end, to e edge of collar or pipe under it. Weight (average per joint), thirty-three s.

1 December 3, 1880.

M. C. MEIGS.
Quartermaster-General, Bvt. Maj. General, U. S. A.

WAR DEPARTMENT,

QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR DARK-BLUE WOOL SHIRTING FLANNEL.

fty-four (54) inches, or ¾ wide, and to be made of pure long-staple American l, not less than one-half blood, free from shoddy, flocks or other impurities, igh not less than ten (10) ounces to the linear yard.

willed and the nap very slightly raised; to contain not less than fifty-six (56) warp and forty-eight (48) threads of filling in each square inch, and to be f sustaining a strain of not less than twenty-six (26) pounds to the inch in warp, and not less than twenty-two (22) pounds to the inch in width of fill- l in the piece.

or to be dark-blue, similar in shade to the standard sample, and to be dyed ol with pure indigo.

1 February 9, 1881.

M. C. MEIGS,
Quartermaster-General, Bvt. Maj. General, U. S. A.

-Officers are requested to write the following upon each of the specifications hirting flannel, light and heavy qualities (Nos. 68 and 69):

e adoption of the dark-blue overshirts, provided for in General Orders, No. .), 1881, these specifications are rendered obsolete."

WAR DEPARTMENT,

QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR OVERSHIRTS.

1.—Dark-blue wool flannel, Army standard, ten (10) ounce; shoulder lining, cotton jeans.

—To be according to sample, single-breasted, with falling collar and coat nd without yoke or slits at sides. The front to open all the way down and ed with five (5) small regulation brass buttons. The collar and cuffs to be with worsted cord, of color according to arm of service, as shown on pattern. egulation button on each cuff. To be without pockets or lining (except the or lining in the shoulder, as in sample). To be of five (5) sizes, of the follow- sions:

	Breast measure.	Length.	Collar measure.	Length of sleeve.
.....	36	29	15	31
.....	38	30	15½	32
.....	40	31	16	33
.....	42	32	16½	33½
.....	44	33	17	34½

Adopted February 16, 1881.

M. C. MEIGS,
Quartermaster-General, Bvt. Maj. General, U. S. A.

NOTE.—Officers will please mark on specifications for grey flannel shirts without collars (No. 19), the following:
“By the adoption of dark-blue flannel shirts, specified in General Orders No. 4, A. G. O., 1881, these shirts will not be issued after July 1, 1881.”

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR UNDERSHIRTS.

Material.—The mixture to consist of fifty per centum (50 per centum) of super pulled natural sheeps-grey and fine medium or X fleece wool, mixed to the shade of standard sample, and fifty per centum (50 per centum) of good middling cotton, and to be free from shoddy, flocks, reworked wool, or other impurities. The whole mixture to be thoroughly carded.
Workmanship.—To be firmly knit on a sixteen (16) gauge machine; to be “taken up” on the shoulder, self finish, with “regular” cuffs; to be bound with drab Prussia binding around the neck and down the breast opening.
To have three (3) eighteen (18) line pearl buttons on front, and corresponding button-holes properly made; to be scoured in the garment, and dried on forms. To be finished like, and equal in all respects to, the standard sample.
To be six (6) sizes, the breast measures and lengths of which shall be as described and the weights not less than the figures given below:

Size numbers	1	2	3	4	5	6
Breast measure	36 ins.	38 ins.	40 ins.	42 ins.	44 ins.	46 ins.
Length of shirt	31 ins.	32 ins.	33 ins.	34 ins.	34 ins.	35 ins.
Weight	14 ozs.	15½ ozs.	16½ ozs.	18 ozs.	19 ozs.	20 ozs.

To be manufactured in the following proportion of sizes to the one hundred: $\frac{1}{4} \frac{1}{8} \frac{1}{8} \frac{1}{8} \frac{1}{8} \frac{1}{8} = 100$.
Adopted February 16, 1881.

M. C. MEIGS,
Quartermaster-General, Bvt. Maj. General, U. S. A.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR HELMETS FOR FOOT TROOPS.

Material.—To be black. To be made of felt composed of one part each of Russian best coney-back, muskrat, extra-coney, and one-half part of wash-blow, or of other suitable material, as determined from time to time upon bids received in response to advertisement.
Shape, &c.—To be in shape according to standard sample. Black enameled-leather band about seven-eighths ($\frac{7}{8}$) of an inch wide to surround the helmet at base of crown and to have an adjustable chin-strap of same material, with brass sliding-buckle as standard sample. The lower edge of helmet to be bound with black enameled leather, and the inside of the visor all around to be lined with green morocco leather pasted to the body with rubber cement. The sweat to be of Belgian sheep-skin, about two (2) inches wide; inside the sweat a band about an inch wide of heavy enameled leather. All to be well stitched in place. A shell ventilator, according to pattern, to take the place of top piece or spike when desired.
Ornaments and trimmings.—The top piece to consist of a spike about three (3) inches high on a base of oak leaves, according to sample, and to be made to screw into the base of ventilator as shown in sample.
Eagle with shield and motto, and side buttons, according to pattern, for each arm of the service. All to be of yellow metal.
The number of regiment, or device of corps, to be in white metal and be borne on the lower half of shield on eagle's breast, according to sample.
The standard sample to be followed in all respects as to shape, quality of material, workmanship, &c.
To be of six (6) standard sizes, numbered from one to six (1 to 6) inclusive, corresponding to the trade sizes, 6½ to 7½, inclusive.

Buttons, rubber						174
Buttons, bone						
Buttons, metallic						
Silk, sewing						
Silk, sewing						
Silk, twist						
Cotton thread						
Cotton thread						
Linen thread						
Linen thread						
Tailor's crayons						
Webbing						
Cotton duck, blue						
Bunting						
Cords and tassels, coat.						
Line, tent.						
Buckles, tent.						
Straps, tent.						
Chains, tent.						
Rings, tent.						
Rings, galvanized						
Sockets, tent.						
Duck, tent.						
Rope, cotton.						
Ratline						
Twine, cotton						
Rope, tent.						
Slips, tent.						
Buttons, tent.						
Grommets, brass						
Beeswax						
Gum, tragacanth						
Wax, hard						
Wax, liquid.						
Epsom salts						
Rye flour						
Glue						
Oil, palm						
Oil, sperm						
Oil, neatfoot						
Oil stones						
Oil cups						
Acid, oxalic						
Turpentine						
Dressing, shoe.						
Ink, burnishing						
Ink, indelible.						
Ink, writing						
Paper, sand						
Paper, sand.						
Paper, petroleum						
Paper, wrapping						

rch 25, 1881.

M. C. MEIGS,
Quartermaster-General, Bvt. Maj. General, U. S. A.

r submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.

RTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

showing quantity of clothing, camp and garrison equipage issued to the National
abled Volunteers, under the act of January 23, 1873, during the fiscal year end-
1881.

January 12, 1881, for 1,334 suits of clothing, at \$22.03..... \$29,388 02
the Quartermaster's Department on account of clothing over-
for last annual report 47

me, clothing to the value of..... 29,387 55
count during the fiscal year ending June 30, 1881:
coats, at 82½ cents \$8,204 52
jackets, at 46½ cents 2,862 54
ts, lined, at 80½ cents 5,256 31
ts, unlined, at 49½ cents 2,242 45
lined, at 80½ cents 887 81
lined, at 49½ cents 460 77
ts, at \$2.40 9,472 80
..... 29,387 20

re Home, June 30, 1881 35

submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.

RTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

showing articles of clothing, camp and garrison equipage issued to Indians
during the fiscal year ending June 30, 1881.

To whom issued.	Articles.	Price.	Amount
Prisoners at Fort Buford.	10 camp-kettles	\$0 44	\$4 40
	48 mess-pans	20	9 60
	20 axes	1 00	20 00
	20 helves	14	2 80
	15 spades	92	13 80
	2 pickaxes	83	1 66
	6 Sibley tents	22 47	134 82
	6 Sibley tent poles	1 20	7 20
	6 Sibley tent tripods	2 25	13 50
	12 Sibley tent stoves	4 00	48 00
	50 joints Sibley tent stove-pipe	11	5 50
	2 hospital tents	36 00	72 00
	2 hospital-tent flies	13 50	27 00
	2 sets hospital-tent poles	3 90	7 80
	7 wall-tents	12 99	90 93
	3 wall-tent flies	4 62	13 86
	7 sets wall-tent poles	80	5 60
	83 common tents	6 23	517 09
	41 sets common tent-poles	75	30 75
	5 barrack chairs	1 25	6 25
	400 woolen blankets	4 38	1,752 00
al			2,784 56

submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.

EMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

A.—Statement showing articles of clothing, camp and garrison equipage on hand, &c.—Continued.

MATERIALS, &c.—Continued.

Articles.	On hand June 30, 1890.	Purchased.	Received from depots and posts.	Gained.	Total.	Sold.	Transferred to other depots.	Expended.	Issued.	On hand June 30, 1891.
Boot-seam rubbers.....	1		1		2					1
Boot-crimping forms.....	150		250		400			40		390
Boot-trees.....	3				3					3
Boot-trees, automatic.....	1		3		4					4
Boot-trees, automatic table.....	1				1					1
Cloth-holders.....	4				4					4
Cloth-weights.....	6				6					6
Crank.....	1				1					1
Clamps.....	3				3					3
Crimping-breaks.....	2	3	3		8					5
Crimp-screws.....	100				100					100
Crimping shoe-jacks.....	10				10					10
Cutting-blocks.....	1				1			1		
Crispin hammers.....	54		144		198			8		190
Cloth-beams.....	1				1					1
Cutters' tables.....	28				28					28
Cloth-cutting blades.....	69	12			81	24		12		45
Baskets.....	2				2					2
Boxes, patent.....	9				9					9
Blades, perine.....	2				2	2				
Buffer steels.....	3				3			1		2
Books, text.....	25				25					25
Chase skiving-machine.....		1			1					1
Dies, assorted.....	40	14			54					54
Dies, counter.....	2				2					2
Dies, heel.....	3				3					3
Edge-planes.....	37	12			49					49
Edge-shaves.....	12				12					12
Edge planes and pressers.....		72			72					72
Drivers for heelers.....		100	100		200		100	100		
Figures, steel.....	1	1	1		3					2
French wheel.....	3				3					3
Glass and rosewood cases.....	3				3					3
Goner-irons.....	4				4			1		3
Heel-balls.....	36	288	288		612		288	300		24
Heel-shaves.....	66	144	144		354		144	100		106

—Statement showing articles of clothing, camp and garrison equipage manufactured at the military prison for the Quartermaster's Department during the fiscal year ending June 30, 1881; also cost of materials, labor, &c.

Articles.	Number made.	Cost.				Total.
		Material.	Civilian labor.	Prison labor.	Royalty on machines.	
Coats	34,163	\$90,912 20	\$2,623 34	\$5,334 20	\$173 65	\$99,043 39
Shoes	25,944	44,534 55	1,176 66	2,151 70	128 84	47,991 75
Arrack chairs	1,656	1,700 55	.....	319 80	.....	2,020 35
Booms	4,356	528 74	.....	169 50	.....	698 24
Total		137,676 04	3,800 00	7,975 20	302 49	149,753 73

Average cost of boots :	
Prison labor	\$0 16
Material, royalty, and civilian labor	2 74
Total	<u>2 90</u>

Average cost of shoes :	
Prison labor	\$0 08
Material, royalty, and civilian labor	1 77
Total	<u>1 85</u>

Average cost of chairs :	
Material	\$1 03
Prison labor	19
Total	<u>1 22</u>

Average cost of brooms :	
Material	\$0 12
Prison labor	4
Total	<u>16</u>

Respectfully submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.

WAR DEPARTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

L.—Statement showing value of labor performed for the Quartermaster's Department by the military prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1881.

	Number of days' work.	Per day.	Amount.
Prisoners making boots and shoes.....	24, 953	\$0 30	\$7, 485 2
Prisoners making barrack chairs.....	1, 066	30	319 2
Prisoners making corn brooms.....	565	30	169
Prisoners repairing chairs and lockers.....	25	30	7
Prisoners making boxes and crates for shipping boots, brooms, and chairs.....	1, 124	30	337
Prisoners making harness.....	2, 201	30	660
Prisoners making boxes for packing harness.....	134	30	40
Prisoners repairing buildings.....	22	30	6
Prisoners (stone-cutters).....	147	30	44
Prisoners laying pavement.....	12	30	3
Prisoners laying pavement.....	27	20	5
Prisoners cutting grass.....	24	20	4
Prisoners laborers, general police.....	3, 916	20	783
Prisoners in storehouses and general work.....	4, 870	20	974
Prisoners crushing rocks for roads.....	5, 008	20	1, 001
Prisoners repairing roads.....	2, 908	20	581
Prisoners cutting and packing ice.....	1, 791	20	358
Prisoners sawing wood.....	80	20	16
Prisoners shoveling snow.....	117	20	23
Prisoners' drainage of fort.....	413	20	82
Prisoners removing and preparing ground for targets.....	870	20	174
Teams for Quartermaster's Department.....	8	100	8
Total.....	49, 781		12, 887

Respectfully submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.

WAR DEPARTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

M.—Statement showing quantity of clothing, camp and garrison equipage issued to sufferers from the overflow of the Missouri River during the fiscal year ending June 30, 1881, — estimated money value of the property and cost of transportation.

[Issued by Capt. D. D. Wheeler, A. Q. M., U. S. A.]

Date of issue.	To whom issued.	New patterns.			
		Shirts.	Drawers.	Stockings.	Blankets.
1881.					
Apr. 30	Destitute citizens, Yankton and vicinity.....	33		37	14
May 2	do.....	107	82	72	56
3	do.....	2		24	46
4	do.....	78	39	86	46
5	do.....	80		41	17
12	Destitute citizens, Bon Homme, Dak.....				3
6	Destitute citizens, Green Island, Nebr.....		2		
9	Destitute citizens, Gayville, Dak.....		13		5
12	Destitute citizens, Clay County, Dak.....		48	180	18
28	Destitute citizens, Elk Point, Dak.....		85		1
Total.....		300	269	500	42

M.—Statement showing quantity of clothing, &c.—Continued.

Date of issue.	To whom issued.	Old pattern.										Value	
		Drawers.	Hats.	Forage caps.	Trousers, foot-made.	Sack coats, lined.	Sack coats, unlined.	Blouses, lined.	Shoes, pegged.	Shoes, sewed.	Shirts.		Blankets, woolen.
1891.													
Apr. 30	Destitute citizens, Yankton and vicinity.	29											\$122 10
May 2	do		43	5	81		15	44	61				840 61
3	do	28	44	47	49	16	23		49		77		592 36
4	do	8	45	48	45				45				495 34
5	do	2	35	35	44		1		46				344 27
12	Destitute citizens, Bon Homme, Dak.												21 90
6	Destitute citizens, Green Island, Nebr.		34	24	35				35		49		168 40
9	Destitute citizens, Gayville, Dak.	12	26	92	101	39			147		70		727 51
12	Destitute citizens, Clay County, Dak.		55	200	175	55			184	27	195		1,765 40
28	Destitute citizens, Elk Point, Dak.		48	28	92	55	37		76		97	24	723 58
	Total.....	79	320	479	602	166	77	44	647	27	488	24	5,607 46
Add cost of transportation of the above clothing from the general depot at Saint Louis to Yankton, Dak., \$1,370 pounds, at \$4.50 per 100 pounds.....													1,411 65
	Total.....												7,219 11

Respectfully submitted.

S. B. HOLABIRD,

Assistant Quartermaster-General, U. S. A.

WAR DEPARTMENT, QUARTERMASTER-GENERAL'S OFFICE,

Washington, D. C., September 13, 1891.

N.—Statement of camp and garrison equipage loaned by the Quartermaster's Department to various organizations, under act of Congress, during the fiscal year ending June 30, 1891, and the amounts of damage, loss, &c., sustained by the department.

Dates of—		To whom loaned.	Hospital tents, new.								Hospital tent poles, ridge.	Hospital tent poles, upright.	Hospital tent rope, sets.	Hospital tent pins, large.	Hospital tent pins, small.	Wall tent pins, large.
Loan.	Act of Congress.		Hospital tents, new.	Hospital tents, damaged.	Hospital tent flies.	Hospital tent poles, ridge.	Hospital tent poles, upright.	Hospital tent rope, sets.	Hospital tent pins, large.	Hospital tent pins, small.						
1890.	1890.															
May 22	Apr. 22	Soldiers' reunion at Milwaukee, Wis.	613	389		1,000	2,000	68	1,160	1,115						
Aug. 3	Apr. 16	Knight Templar celebration at Chicago.	824		1	825	1,650		17,250							
Aug. 3	May 28	Soldiers' reunion, Columbus, Ohio.	500			500	1,000									
Aug. 16	June 4	Soldiers' reunion, Kirksville, Mo.	300			500	500									
Aug. 24	June 9	Soldiers' reunion, Wichita, Kans.	100			100	200		4,200							
Sept. 2	Apr. 16	Soldiers' reunion, Central City, Nebr.	300			300			5,488							
Sept. 8	June 1	Soldiers' reunion, Muscatine, Iowa.	99			100	200		654							
Sept. 22	June 16	Soldiers' reunion, Atlanta, Ga.	200			200	400									
		Deficiency of.....	7		1	10	46	20	2,959	1,083						

N.—Statement of camp and garrison equipage, &c.—Continued.

Dates of—		To whom loaned	Guidons, cavalry	Standards, cavalry.	Colors, regimental.	Colors, national.	Color-belts.	Color-strings.	Flags, garrison.	Flags, post.	Flags, recruiting.
Loan.	Acts of Congress.										
1880.	1880.										
May 22	Apr. 22	Soldiers' reunion at Milwaukee, Wis.	50	50	50	50	200	200			
Aug. 3	Apr. 16	Knights Templar celebration at Chicago.			10	10			10	20	150
Aug. 2	May 28	Soldiers' reunion, Columbus, Ohio.									
Aug. 16	June 4	Soldiers' reunion, Kirksville, Mo.									
Aug. 24	June 9	Soldiers' reunion, Wichita, Kans.									
Sept. 2	Apr. 16	Soldiers' reunion, Central City, Nebr.									
Sept. 8	June 1	Soldiers' reunion, Muscatine, Iowa.									
Sept. 22	June 16	Soldiers' reunion, Atlanta, Ga.									
		Deficiency of				2	4	23			

Dates of—		To whom loaned.	Amount of—		Expense on account of agent.	
Loan.	Acts of Congress.		Loss.	Damage.	Transportation.	Per diem.
1880.	1880.					
May 22	Apr. 22	Soldiers' reunion at Milwaukee, Wis.	\$335 42	\$90 43		\$96 05
Aug. 3	Apr. 16	Knights Templar celebration at Chicago.	120 62	6 42		144 60
Aug. 2	May 28	Soldiers' reunion, Columbus, Ohio.			\$14 70	52 50
Aug. 16	June 4	Soldiers' reunion, Kirksville, Mo.			40 70	111 25
Aug. 24	June 9	Soldiers' reunion, Wichita, Kans.	16 12	2 90	60 15	263 50
Sept. 2	Apr. 16	Soldiers' reunion, Central City, Nebr.	156 05	12 30	61 50	119 00
Sept. 8	June 1	Soldiers' reunion, Muscatine, Iowa.	2 45	2 16	33 23	104 95
Sept. 22	June 16	Soldiers' reunion, Atlanta, Ga.	46 40	10 85	61 75	99 70
		Total				2,028 31

Respectfully submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.

WAR DEPARTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 12, 1881.

O.—Statement showing articles of clothing, camp and garrison equipage, issued by the Quartermaster's Department to the Lady Franklin Bay and Point Barrow expeditions during the fiscal year ending June 30, 1881.

To whom issued.	Object.	Articles.	Quantity.
Lieut. A. W. Greeley, Fifth Cavalry, acting signal officer.	Lady Franklin Bay expedition.	Buffalo coats	25
		Drawers.....pairs..	50
		German socks.....do..	50
		Wool stockings.....do..	100
		Wool mittens.....do..	100
		Boots.....do.....	50
		Wool blankets	50
		Shirts.....	200
		Stable frocks	50
		Overalls.....pairs..	50
		Trousers.....do.....	50
		Large buffalo robes	25
		Campaign hats	50
		Muskrat gauntlets.....pairs..	50
		Iron bunks.....	25
		Camp kettles.....	10
		Axes.....	6
		Ax helves.....	12
		Hatchets.....	12
		Hatchet helves	24
		Spades.....	12
		Shovels.....	12
		Pickaxes.....	6
		Pickax helves	18
		Hospital tents, flies, and poles	2
		Wall tents, flies, and poles.....	4
		Common tents and poles.....	6
		Mess pans.....	20
		Camp colors.....	2
		Recruiting flags	2
		Halliards.....feet..	150
		Chest carpenter tools.....	1
		Tinners' tools.....set..	1
Lieut. P. H. Ray, Eighth Infantry	Point Barrow, Alaska, expedition.	Buffalo overcoats.....	12
		Arctic overshoes.....pairs..	24
		Fur caps.....	12
		Buffalo gauntlets.....pairs..	12

Respectfully submitted.

S. B. HOLABIRD,

Assistant Quartermaster-General, U. S. A.

WAR DEPARTMENT, QUARTERMASTER GENERAL'S OFFICE,

Washington, D. C., September 13, 1881.

P.—Statement of returns of clothing, camp and garrison equipage received and examined, and of letters received and written, during the fiscal year ending June 30, 1881.

Number of returns on hand June 30, 1880 1,048
 Number of returns received during the fiscal year 3,807

Total 4,855
 Number of returns examined during the fiscal year 3,539

Number of returns on hand for examination June 30, 1881 1,316

Number of letters received pertaining to settlement of accounts and to inspection reports and boards of survey 3,461
 Number of letters received, pertaining to purchase, manufacture, and issue of clothing and equipage..... 2,078

Total 5,539

Number of letters written pertaining to settlement of accounts and to inspection reports and boards of survey..... 6,726
 Number of letters written pertaining to purchase, manufacture, and issue of clothing and equipage..... 2,858

Total 9,584

Respectfully submitted.

S. B. HOLABIRD,

Assistant Quartermaster-General, U. S. A.

WAR DEPARTMENT, QUARTERMASTER-GENERAL'S OFFICE,

Washington, D. C., September 13, 1881.

Q.—Statement of the clerical force employed in the clothing, camp and garrison equipage branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1881.

	Clerks.	Copyists.	Laborers.	Total.
On the 30th June, 1880.....	12	1	1	14
On the 30th June, 1881.....	12	1	1	14

In addition to this force, one general-service clerk has been detailed for duty in the clothing supply branch since January 7, 1881.
Respectfully submitted.

S. B. HOLABIRD,
Assistant Quartermaster-General, U. S. A.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 13, 1881.

4.—Annual report of Lieut. Col. J. G. Chandler, Deputy Quartermaster-General, United States Army, of the operations of the Quartermaster-General's Office, pertaining to transportation and indebted railroads, regular and miscellaneous supplies, and miscellaneous claims and accounts, during the fiscal year ending June 30, 1881.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 30, 1881.

GENERAL: I have the honor to submit the following report of the operations of this office pertaining to transportation and indebted railroads, regular and miscellaneous supplies, and miscellaneous claims and accounts, during the fiscal year ending June 30, 1881.

TRANSPORTATION.

During the year the Quartermaster's Department provided transportation by rail, water, wagon, and stage for 46,658 persons, 10,355 beasts, and 136,632 tons of material, as exhibited in statement hereto appended, marked A.

The reports of payments for transportation made by disbursing officers of the department show an aggregate cash expenditure for this service of \$1,802,931.37, of which \$393,156.27 was for the transportation of persons, and \$1,409,775.10 for the transportation of beasts and material.

The larger movements of troops during the year were as follows:

Third Cavalry, Companies C, G, and L, from Department of the Platte to Department of the Missouri, 291 miles.

Second Artillery, Companies E, G, and L, from Department of Texas to Department of South, 1,080 miles.

Sixteenth Infantry, headquarters and ten companies, from Department of the Missouri to Department of Texas, 705 miles.

Twenty-fourth Infantry, headquarters and ten companies, from Department of Texas to Department of the Missouri, 608 miles.

A statement showing these movements, with the length of march or movement in each case, is appended, marked B.

RAILROAD TRANSPORTATION.

By railroad 32,820 persons, 8,782 beasts, and 83,510 tons of material were transported under direction of the Quartermaster's Department during the fiscal year.

Five hundred and twenty thousand six hundred and forty-two dollars and fifty-six cents was paid to the railroad companies in money for this service out of the appropriation for Army transportation, \$212,729.90 being for the transportation of persons, and \$307,912.66 for the transportation of live stock and freight.

Eight hundred and thirty-six thousand six hundred and thirty-eight dollars and five cents was earned by the bonded Pacific Railroads in military transportation during the year, as indicated by accounts rendered, which will not be paid in money, but which, after adjustment and settlement through the accounting officers of the Treasury, will be applied, as directed by law, to the liquidation of their debts to the United States.

Two hundred and fifty thousand dollars was earned by land-grant railroads in military transportation, estimated at ordinary rates for the services performed.

No appropriation is available for payment for any military transportation over land-grant railroads during the fiscal year.

By decision of the Supreme Court the United States is entitled "to the free use of these railroads; * * * the companies are entitled to compensation for all transportation performed by them respectively of troops and property of the government, subject to a fair deduction for the use of their respective railroads."

Assuming this fair deduction to be fifty per centum of ordinary rates, \$125,000 is the estimate of the debt of the department for transportation over these roads during the year.

Unsettled railroad accounts aggregating in amount about \$200,000 are outstanding and cannot be paid until a deficiency appropriation is available, for the reason that the Army transportation appropriation for the last fiscal year has been expended.

Therefore the total estimated value of railroad transportation furnished for the Quartermaster's Department during the year aggregates \$1,807,280.61.

BONDED PACIFIC RAILROADS.

Nine thousand and ninety-three persons, 3,840 beasts, and 41,074 tons of material were transported over the bonded Pacific Railroads for the department during the year. The service performed by each road is shown in the following table:

Name of companies.	Number of persons transported.	Number of animals transported.	Pounds of freight transported.
Pacific	6, 102	2, 266	53, 137, 214
l Pacific	677	419	17, 697, 401
Pacific	1, 698	1, 131	9, 968, 295
ity and Pacific	616	24	1, 345, 077
total	9, 093	3, 840	82, 147, 987

The amounts which will inure for this service to the credit of the respective railroads upon the books of the Treasury, computed at the full rates of their published tariffs of charges, aggregate the sum of \$836,638.05.

The amount inuring to each road is shown in the following table:

Names of companies.	Amount of accounts referred to Treasury for settlement.	Amount of accounts rendered and under examination June 30, 1861.	Estimated amount of accounts not yet rendered.	Total.
Union Pacific.....	\$37 00	\$319,411 91	\$192,067 35	\$511,516 26
Central Pacific.....	58,213 10	115,144 87	115,000 00	288,357 97
Kansas Pacific*.....		31,998 21		31,998 21
Sioux City and Pacific.....	258 00		4,507 61	4,765 61
Total.....	58,508 10	466,554 99	311,574 96	836,638 05

*Merged into Union Pacific Railway Company, and now styled "Union Pacific Railway Company—Kansas Division."

Large amounts of unsettled accounts of these companies have accumulated in this office and the Treasury, involving more work in their adjustment than can be accomplished by the limited clerical force which the office can spare from other current official duties.

The following is a statement of the accounts of these companies which awaited examination and adjustment in this office and settlement by the Treasury at the close of the fiscal year:

Names of companies.	In Treasury.	In Quarter-master-General's office.	Total.
Union Pacific.....	\$130,936 30	\$919,760 95	\$1,050,706 25
Central Pacific.....	391,691 56	115,038 10	506,729 66
Kansas Pacific.....	50,540 60	81,262 35	131,802 95
Total.....	573,168 52	1,116,070 40	1,689,238 92

The extensions and consolidations of the Pacific railroad system have brought under the operation of the Pacific railroad laws thousands of miles of new railroad, the earnings of which by services performed for the government are withheld and applied as directed by law, and swell to an unprecedented extent the number and amount of accounts which can only be settled through this office and the Treasury.

Hence these accounts are accumulating; the papers accompanying them are valuable. Those now in the office are vouchers to accompanying accounts representing a value of over a million dollars. They remain in the care and custody of this office, in a building not fire-proof, until they are reached and disposed of in their order by clerks who can be spared to work on them.

The railroad companies are deprived of the credits due to them for the value of the services shown by these accounts until they are finally settled by the accounting officers of the Treasury.

The following statement shows the total settlements for military transportation over these roads from the date when they were first opened for traffic up to the close of the fiscal year ending June 30, 1881:

Names of companies.	Amount paid in cash under act of July 2, 1864.	Amount credited on bonds under act of July 2, 1864.	Amount withheld under act of March 3, 1873 (Rev.Stat.5260).	Amount withheld under act of May 7, 1878.	Total.
Union Pacific.....	\$1, 693, 360 69	\$1, 693, 360 87	\$3, 177, 387 57	\$468, 518 89	\$7, 032, 628 02
Central Pacific.....	261, 106 21	261, 106 29	659, 124 07	232, 840 21	1, 414, 176 78
Kansas Pacific.....	881, 152 71	881, 152 76	545, 408 23	.....	2, 307, 713 70
Sioux City and Pacific.....	3, 594 28	3, 594 29	39, 491 82	.....	46, 680 39
Total.....	2, 839, 213 89	2, 839, 214 21	4, 421, 411 69	701, 359 10	10, 801, 198 89

No law affecting settlements with these roads for military transportation was passed during the last fiscal year.

The following are the three laws which govern the adjustment of bonded Pacific railroad accounts for transportation furnished the Quartermaster's Department, viz :

[1. Act of March 3, 1873, section 5260 Revised Statutes.]

The Secretary of the Treasury is directed to withhold all payments to any railroad company and its assigns, on account of freights or transportation over their respective roads of any kind to the amount of payments made by the United States for interest upon bonds of the United States issued to any such company, and which shall not have been reimbursed, together with the five per centum of net earnings due and unapplied, as provided by law.

This law applies to all the bonded Pacific railroads, and all the lines and branches owned, leased, controlled, and operated by them.

[2. Act of May 7, 1878, section 2, 20 Stat., p. 58.]

That the whole amount of compensation which may, from time to time, be due to said several railroad companies respectively for services rendered by the government shall be retained by the United States, one half thereof to be presently applied to the liquidation of the interest paid and to be paid by the United States upon the bonds so issued by it as aforesaid, to each of said corporations severally, and the other half thereof to be turned into the sinking-fund hereinafter provided, for the uses therein mentioned.

This law applies to the Union and Central Pacific Railroads and the lines and branches owned, leased, controlled, and operated by those railroads. It does not apply to the Kansas Pacific, the Sioux City and Pacific, or the Central Branch Union Pacific.

[3. Act of March 3, 1879 (20 Stat., p. 420).]

That for the proper adjustment of the accounts of the Union Pacific, Central Pacific, Kansas Pacific, Western Pacific, and Sioux City and Pacific Railroad Companies, respectively, for services which have been or may be hereafter performed for the government for transportation of the Army and transportation of the mails, the Secretary of the Treasury is hereby authorized to make such entries upon the books of the department as will carry to the credit of said companies the amounts so earned or to be earned by them during each fiscal year and withheld under the provisions of section fifty-two hundred and sixty of the Revised Statutes and of the act of Congress approved May seventh, eighteen hundred and seventy-eight: *Provided*, That this shall not authorize the expenditure of any money from the Treasury nor change the method now provided by law for the auditing of such claims against the government: *Provided further*, That this paragraph shall not be construed as to be a disposition of any moneys due or to become due to or from said companies, respectively, or to, in any way, affect their rights or duties or the rights of the United States, under existing laws, it being only intended hereby to enable the proper accounting officers to state upon the books of the Treasury the accounts between the government and said companies respectively.

This law releases the appropriations for Army transportation from any charges on account of transportation over the railroads named, and the amounts found due are not taken from those appropriations, as was done prior to the passage of the law.

LAND-GRANT RAILROADS.

In the act of Congress approved February 24, 1881 (21 Stat., p. 348) making appropriations for the support of the Army for the fiscal year ending June 30, 1882, an appropriation was made in the following terms

For the payment for Army transportation lawfully due such land-grant railroads as have not received aid in government bonds, to be adjusted by the proper accounting officers in accordance with the decisions of the Supreme Court in cases decided under such land-grant acts, but in no case shall more than fifty per cent. of the full amount of the service be paid until a final decision shall be had in respect of each case in dispute, one hundred and twenty-five thousand dollars: *Provided*, That such payment shall be accepted as in full of all demands for said services.

And in the act of Congress approved March 3, 1881 (21 Stat., p. 41) making appropriations to supply deficiencies, &c., an appropriation was made in the following terms:

To pay land-grant railroads fifty per centum of what the Quartermaster's Department finds justly due them for transportation during the fiscal year ending June thirtieth, eighteen hundred and eighty, and prior years, to be accepted in full of all demands for said services, two hundred and seventy-five thousand dollars.

The law of February 24, first quoted, provides for payments for services during the year ending June 30, 1882, under the restrictions imposed.

The law of March 3 provided for payments under the restrictions imposed for services during the year ending June 30, 1880, and prior years. No appropriation has yet been made for service for the fiscal year ending June 30, 1881, although estimated for (see page 15, House Ex. Doc. No. 44, Forty-sixth Congress, third session).

The following is a statement of land-grant railroad accounts filed in this office up to June 30, 1881, which, with the exception of charges therein, amounting to \$31,566.92, for service during the year ending June 30, 1881, can be settled, as some of them have been, under the law of March 3, 1881, above quoted, conditional upon the railroad companies filing formal acceptances of the provisions and restrictions of that law :

Names of railroad companies.	Accounts as rendered at full rates.		Examined, adjusted, and referred to Treasury for settlement.		Awaiting examination in the Quartermaster-General's Office.		Settled by Treasury at 50 per cent. of rates fixed by Quartermaster's Department.		Awaiting settlement in Treasury at full rates.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
Western Railroad of Minnesota	2	\$5,051 19	2	\$5,051 19					2	\$5,051 19
Chicago, Milwaukee and Saint Paul	5	10,381 90	5	10,333 00					5	10,333 00
Mobile and Montgomery	6	817 20	6	808 17					6	808 17
Atchison, Topeka and Santa Fe	109	230,263 61	108	227,383 31	1	\$991 82	93	\$78,837 93	15	67,986 97
South and North Alabama	5	5,726 66	5	5,723 96					5	5,723 96
Chicago and Northwestern	7	25,656 51	4	15,506 51	3	2,648 66	3	5,660 77	1	4,181 00
Illinois Central	22	48,325 63	20	34,082 07	2	14,175 11	3	3,852 19	17	28,029 33
Leavenworth, Lawrence and Galveston	3	1,061 15	3	1,055 91					3	1,055 91
Alabama and Chattanooga	2	2,396 35	2	2,396 35					2	2,396 35

Companies.	Accounts as rendered at full rates.		Examined, adjusted, and referred to Treasury for settlement.		Awaiting examination in the Quartermaster-General's Office.		Settled by Treasury at 50 per cent. of rates fixed by Quartermaster's Department.		Awaiting settlement in Treasury at full rates.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
and West	1	\$568 40	1	\$845 45	.....	.....	.....	.....	1	\$845 45
d Indiana..	1	105 52	1	105 52	.....	.....	.....	.....	1	105 52
Missouri	5	5,483 95	5	4,678 59	.....	.....	.....	.....	5	4,678 59
(a).....	7	3,494 76	7	3,015 08	.....	.....	.....	.....	7	3,015 08
nt Joseph..	5	647 21	5	645 87	.....	.....	.....	.....	5	645 87
eridian....	7	5,260 84	7	5,147 74	.....	.....	7	\$2,575 31	.....	.....
Dalton ..	3	2,093 71	3	1,306 47	.....	.....	.....	.....	3	1,806 47
Island and	5	19,252 90	2	3,733 67	3	\$15,420 13	.....	.....	2	3,783 67
d of Missis-	1	386 30	1	314 22	.....	.....	.....	.....	1	314 22
acific	6	26,961 76	6	26,907 01	.....	.....	6	13,453 50	.....	.....
gton and ..	1	7,470 88	1	7,444 12	.....	.....	.....	.....	1	7,444 12
ul, Minne-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
maha line	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Paul	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
y and the	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
n Railroads	10	19,115 84	7	14,379 31	3	4,243 23	.....	.....	7	14,379 31
Nashville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
the South	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
abama and	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Railroads ..	1	3,064 01	.....	.....	1	3,064 01	.....	.....	.....	.....
operating	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
erior and	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e Western	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
the Saint	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
cific Rail-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	9	53,628 88	5	52,867 86	4	761 02	1	19,627 41	4	13,613 03
.....	5	299 75	5	298 26	.....	.....	.....	.....	5	298 26
loux City..	2	7,477 44	2	7,456 56	.....	.....	.....	.....	2	7,456 56
uctions by	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ctions in	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
-General's	.....	.....	.....	12,202 17	.....	.....	.....	.....	.....	.....
.....
	230	484,991 85	213	443,688 37	17	41,303 48	113	124,007 11	100	181,321 63

ving are the land-grant railroad companies interested in the
ch 3, 1881, which have filed acceptances of the provisions
ions of that law:

Topeka and Santa Fé.

Gulf and West India Transit Company.

nd Northwestern.

Rock Island and Pacific.

Burlington and Quincy.

entral.

Pacific.

and Nashville, for the Pensacola Railroad Company.

and Nashville, for the South and North Alabama Railroad

Saint Paul, Minneapolis and Omaha Line, for the Saint Paul
ity Railroad Company.

d, Minneapolis and Manitoba.

is and San Francisco.

Pacific, for the Western Railroad of Minnesota.

of the railroads interested, it is observed, have not filed ac-
the terms of the law, and a number of accounts which might
nder the law have not been presented, presumably because

of the requirement that 50 per cent. of their amounts shall be accepted "in full of all demands."

Accompanying this report and marked C and D are copies of General Orders No. 69 of 1880, and No. 57 of 1881, prepared in this office and issued by the Adjutant-General of the Army, September 30, 1880, and June 22, 1881, publishing in separate tables the various classes of land-grant railroads, showing the present name of each railroad, the termini of the land-grant, and bonded portions of the roads, and extracts from the laws, with their dates, statute, and page, showing conditions of grant to each, so far as relates to the use of the road by the United States together with instructions regulating settlements for military transportation over such roads as authorized and provided by existing laws.

The laws respecting military transportation over the land-grant railroads named in Tables 2, 4, and 5 of these General Orders seem clear and unambiguous, and the relations between the War Department and these railroads have been such that there has been little difficulty in securing transportation under the terms of the laws applicable; although it is remarked that in many cases no penalty is attached to non-performance by the railroad companies of the requirements of the laws, and on this subject attention is invited to House Ex. Doc. No. 94, Forty-third Congress, second session, and Senate Ex. Doc. No. 28, Forty-fifth Congress, third session.

The relations between the War Department and the land-grant railroads named in Table No. 3 may be briefly stated as follows:

During the war and up to March 1, 1867, it was the rule of the department to pay to land-grant railroad companies 66⅔ per centum of what were known as "military rates."

These military rates were less than the ordinary tariff rates of the railroads, and with few exceptions were uniformly adopted in the settlement of all railroad accounts for military transportation which accrued during the war and thereafter up to March 1, 1867, having been agreed upon between the War Department and a convention of railway managers in the early days of the war.

After March 1, 1867, non-land-grant railroad companies were paid their tariff rates, unless special arrangements more favorable to the government could be secured, and land-grant railroad companies were paid 66⅔ per centum of their tariff, or such special rates.

The 33⅓ per cent. deducted from the rates of land-grant railroads was for the value to the United States of the conditions of the land grants, which provided that the railroads shall be and remain public highways for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States.

Payments upon this basis were made for all military transportation over these roads until June 16, 1874.

Under the laws of June 16, 1874 (18 Stat., p. 74), June 22d, 1874 (18 Stat., p. 133), and March 3, 1875 (18 Stat., p. 453), payments by the War Department to these railroads were discontinued, and they were directed to the Court of Claims and Supreme Court, for judicial decision whether they were legally entitled to payment for military transportation, and for recovery by suit of amounts which might be legally due therefor.

Several suits have been brought under the provisions of those laws, and in each case decided, judgment has been rendered for the railroads.

The doctrine that payments should be made to these land-grant railroads was announced by the Supreme Court in the case of the Lake

erior and Mississippi and the Atchison, Topeka and Sante Fé Rail-
ls *vs.* the United States (October term 1876, Nos. 487 and 683).

he Court of Claims in case of Atchison, Topeka and Sante Fé Rail-
l *vs.* United States (No. 11471, December term of 1879) decided
; by provisions of the act of Congress under which the lands were
ited, fifty per centum of ordinary transportation rates is payable to
railroads in cash for services done by their employés and cars and
nes in government transportation, and the remaining fifty per cent.
be reserved and withheld as the value of the use of the railroads
ie government as highways.

his case has been appealed to the Supreme Court, both by the United
es and the railroad company, upon the question of the proper per
um of deduction from ordinary rates to which the United States is
tled.

ongress in the Sundry Civil law of March 3, 1879 (20 Stat., p. 390),
ropriated \$300,000 to pay land grant railroads arrears of Army
sportation, and provided that in no event should "more than 50 per
um of the full amount allowed by the Quartermaster-General be
."

ongress also by acts approved February 24, 1881, and March 3, 1881,
ed on pages 13, 14, made further appropriations to pay land-grant
oads.

hus the executive, legislative and judicial departments of the gov-
nent have each and all decided that these land-grant railroads are
tled to payments for military transportation.

n estimate of \$125,000 has been made to pay these railroads for the
sportation of United States troops and military supplies during the
d year ending June 30, 1883, on the basis of 50 per cent. of what
Quartermaster's Department finds to be the value of such transpor-
on service.

a deficiency estimate for the same amount has likewise been made to
the outstanding accounts which accrued during the fiscal year end-
June 30, 1881.

but as the question of what should be deducted from the ordinary
es of these railroad companies on account of the right of the govern-
nt to free use of their roads as highways is still pending in the Su-
me Court, and as it is the opinion of many railroad experts that 50
cent. of such rates is too large a deduction on that account, it is
ught that the provisions of the laws of February 24 and March 3,
1, requiring an acceptance by the railroads of 50 per cent. of such
es "in full of all demands for such service," should not be repeated
uture appropriations of this character.

WAGON AND STAGE TRANSPORTATION.

The Quartermaster's Department transported by wagon, including
tractors' trains, teams hired for special service, and public teams,
428 tons of military stores; the cost of this service, as reported by
bursing quartermasters, was \$853,007.45.

sixty-two contracts for wagon transportation, made by officers of the
artermaster's Department, were received at this office during the
r, an abstract of which, showing names of contractors, routes of sup-
, and rates of contracts, accompanies this report, marked E.

ive thousand and forty-seven passengers, and 24,744 pounds of mili-
stores and extra baggage were transported by stage, under direc-
of the Quartermaster's Department, during the year, at a cost of
\$872.44.

WATER TRANSPORTATION.

During the fiscal year there were carried by water, for the department, 8,642 persons, 1,573 beasts, and 18,681 tons of material, at a cost of \$453,743.72.

This service was rendered by vessels belonging to established lines, by contract, and by vessels owned and chartered by the United States.

Five contracts for water transportation, made by officers of the Quartermaster's Department, were received at this office during the year, an abstract of which accompanies this report, marked F.

The following-named vessels, owned by the War Department, have been in service of the Quartermaster's Department during the fiscal year, viz: Steamer Henry Smith, in New York Harbor; propeller Ordnance, employed by Ordnance Department in New York Harbor; steam-tug Atlantic, in New York Harbor; steam-tug Resolute, in Boston Harbor; propeller General McPherson, in San Francisco Harbor; steam-launch Thayer, at Fort Adams, R. I.; steam-launch Monroe, employed at Fort Monroe, Va.; steam-launch General Greene, employed at Fort McHenry, Md.; steam-launch Hamilton, at David's Island, New York Harbor; steam-launch General Jesup, at Governor's Island and David's Island, New York Harbor; steam-launch Barrancas, at Fort Barrancas, Fla.; steamboat General Sherman, employed on the Upper Missouri and Yellowstone rivers; schooner Matchless, employed at Key West, Fla.; steam-launch Chelan, employed on Lake Chelan, Wash.; steam-launch Amelia Wheaton, on Lake Cœur d'Alene, Idaho; steam-launch Lillie Lee, employed at Fort Totten, Devil's Lake, Dak. Statement marked G.

The total cost of running and maintaining these vessels during the fiscal year was \$94,600.16.

In June, 1878, the construction of a steam-launch for service on Devil's Lake, Dak., was begun under the orders of the post commander at Fort Totten, Dak.

The lumber used in building this boat was cut in the vicinity of the post, and all of the labor in connection with its construction was performed by enlisted men of the command with but little cost to the government.

The launch was completed about July 23, 1879. Its dimensions are reported to be as follows: Length of keel, 37 feet 4 inches; length over all, 43 feet; breadth of beam, 10 feet 4 inches; depth of hold, 5 feet.

The launch is named the Lillie Lee and is about 40 tons burden. Her cost is reported to have been \$2,500.

In October, 1880, the acting assistant quartermaster at Fort Totten made requisition for a new engine and boiler for use on this boat, to replace the machinery then in use, which was found not to be of sufficient power.

There being in store at the Philadelphia depot of the Quartermaster's Department two sets of machinery for steam-launches, it was deemed best to send one of these sets of machinery to Fort Totten to be placed in the launch.

Col. D. H. Rucker was accordingly directed in January, 1881, to invoice and ship, securely boxed, one set of this machinery to the acting assistant quartermaster at Fort Totten, together with proper grate-bars suitable for the use of wood as fuel instead of coal.

The machinery was received at Fort Totten May 18, 1881, and is believed to have been placed in the launch, though no special report on the subject has been made to this office.

In August, 1879, on recommendation of the commanding generals, Department of the Columbia, and Military Division of the Pacific, the purchase of a steam-launch for service on Lake Cœur d'Alene, for supplying Fort Cœur d'Alene, and also one for service on Lake Chelan, for use at Camp Chelan, was authorized.

The hull of the steam-launch for Fort Cœur d'Alene was built at that post, mostly by the labor of extra-duty men, and of material sawed by the government saw-mill. The cost of the hull has not been reported to this office. The cost of the machinery is reported to have been \$2,750. She was completed August 24, 1880, is of 40 tons burden, and is called the Amelia Wheaton.

The steam-launch for Camp Chelan was purchased at Portland, Oreg., on the 28th November, 1879, and started for Priest's Rapids December 1, 1879. She was transported by rail over the portages at the Cascades and the Dalles, and reached Wallula December 16, 1879. It was found impracticable to go further, on account of the severe winter, and she was hauled out to wait for spring. She remained at that place until May 8, 1880, when she proceeded to Priest's Rapids, where she arrived May 10, 1880.

In attempting to run the rapids in the river the launch struck the rocks, capsized, and was swamped. She was afterwards raised, and it having been found impracticable to proceed by river, she was taken back to White Bluffs, and transported by land from that point to the Columbia River, opposite Camp Chelan, where she arrived August 20, 1880. The boiler and machinery were taken out of the boat, and transported to Lake Chelan on a heavy truck belonging to the Quartermaster's Department. The hull was cut in two, and transported on two wagons, and was put together in the Columbia River, opposite Camp Chelan. She is named the Chelan, and is of 15 tons burden. Her cost is reported to have been \$3,510.

According to reports received from officers of the Quartermaster's Department there have been thirteen vessels of different kinds employed at various times under charter, as the necessities of the service required, during the year, at an expense of \$21,734.64, a statement of which accompanies this report, marked H. The total amount reported by officers of the department to have been expended on account of water transportation during the year, is \$453,743.72. Of this amount \$116,334.80 was for purchase, charter, maintenance, and operations of vessels, and other expenditures incident to water transportation.

TRANSPORTATION ACCOUNTS AND CLAIMS.

One thousand four hundred and forty accounts and claims, amounting to \$1,399,645.20, were adjusted or acted upon in the transportation branch of this office during the year; of these, 1,307, amounting to \$1,257,497.61, were referred to the proper bureau or officer for settlement; 84, amounting to \$77,668.22, were unfavorably reported upon and rejection recommended to the Secretary of War or accounting officers; and 49, amounting to \$64,479.37, were suspended for additional evidence; 488, amounting to \$1,269,207.63, were at the close of the fiscal year awaiting action or under adjustment.

INDEBTED RAILROAD COMPANIES.

On the 1st day of July, 1881, there was due the United States from railway companies which purchased rolling stock and railway material,

under executive orders, at the close of the war, whose debts had not been compromised and settled under the acts of Congress of March 3, 1871, February 27, 1875, and March 3, 1877, excluding the two insolvent companies, the Mississippi, Gainesville and Tuscaloosa and the Nashville and Northwestern Railroad Companies, \$1,068,911.72.

During the fiscal year ending June 30, 1881, the interest and charges against the indebted companies amounted to \$42,611.49, and the payments by military transportation and postal service to \$5,088.66, leaving unpaid July 1, 1881, \$1,106,434.55.

In addition to these payments, there was received in postal dues on account of the indebtedness of the Nashville and Northwestern Railroad Company the balance due for such service, which was appropriated by the last Congress, viz, \$2,475.83.

No part of the amount found due the Mobile and Ohio Railroad Company for military transportation, payable from the appropriation of \$300,000, made March 3, 1879, or from the appropriation of \$275,000, made March 3, 1881, has been placed to the credit of that company, the awards for such service being withheld by the accounting officers of the Treasury, pending the settlement of the account of that company for property purchased.

On January 27, 1881, the following letter was sent to the governor of Tennessee in relation to the indebtedness of the State for property purchased for the Edgefield and Kentucky and Memphis, Clarksville and Louisville Railroads:

SIR: In 1865, at the close of the rebellion, the State of Tennessee purchased of the United States rolling stock and railway material for the use and benefit of the Edgefield and Kentucky Railroad of the value of \$114,772.86, and for the benefit of the Memphis, Clarksville and Louisville Railroad of the value of \$336,932.36, and under special act of the legislature of said State gave bonds in double the value of the property purchased, for the payment of the debt within two years, with interest at the rate of 7.3 per cent. per annum.

The payments on these debts to date aggregate \$2,137.88 and \$71,013.44, respectively; and the balance due is \$246,559.92 and \$645,077.63, respectively.

No payments are being made on these debts at the present time, and they are increasing by accumulation of interest.

Your attention is invited to this matter, with request that you inform this office if you cannot make arrangements to pay the debts at an early day, and, if you cannot do so, that you submit the matter to the legislature now in session, and request it to provide the necessary funds for their payment.

Very respectfully, your obedient servant,

M. C. MEIGS,

Quartermaster-General, Brevet Major-General, U. S. A.

No reply has been received to this letter, and the debts are still unpaid.

The efforts to secure from Congress the passage of an act directing the Secretary of War to reopen the settlements made with certain companies whose debts have been paid in full, and to adjust the accounts on the basis of the reduction in the valuation of the property sold, in the rate of interest paid, and an increase of the rates paid for military transportation, referred to in the last annual report of the officer in charge of the collection of these debts, have thus far signally failed.

It is possible that the facts presented by the Quartermaster-General, from time to time, have convinced Congress that there are no just grounds on which to base such a re-adjustment of the accounts.

Accompanying this report is a table, marked I, showing in detail the amounts of the debts of the several companies, the amounts paid, and the amounts remaining unpaid.

amounts received in postal dues on account of the debts of the Louisville and Manchester Railroad Company, \$5,050.87, and the Illinois and Northwestern Railroad Company, \$2,475.83, have been deposited in the Treasury of the United States according to law, and applied on the debts of the respective companies. No other moneys were received during the fiscal year on account of these debts.

REGULAR AND MISCELLANEOUS SUPPLIES.

Animals.—The following statement shows the number of horses and mules purchased in the several military departments and at general army depots during the fiscal year, also their total cost and average cost.

Cavalry and artillery horses.

Where purchased.	Number.	Total cost.	Average cost.
Department of Dakota	227	\$35,218 15	\$127 14
Department of the Missouri	494	65,510 00	132 61
Department of the Platte	100	11,740 00	117 40
Department of Texas	192	26,868 00	139 93
Department of California	33	4,555 00	138 03
Department of the Columbia	61	6,016 06	98 62
Department of Arizona	221	19,448 00	88 00
Department of West Point	31	4,475 00	144 35
Army depot, New York	25	5,601 50	224 06
Army depot, Missouri	4	495 00	123 75
Total	1,438	179,926 71	125 12

The total number of cavalry and artillery horses authorized to be purchased during the year was 1,551, at a total cost of \$196,716, the average cost being \$126.83. All the deliveries had not, it is presumed, been made under the contracts when the reports embraced in the foregoing table were rendered.

Mules and team horses purchased.

Where purchased.	Mules.			Horses.		
	No.	Total cost.	Average cost.	No.	Total cost.	Average cost.
Department of the East				4	\$690 00	\$172 50
Department of the South	2	\$280 00	\$140 00			
Department of Missouri	100	13,500 00	135 00			
Department of Texas	310	30,684 80	98 98			
Department of California	163	16,060 00	98 52	2	100 00	50 00
Department of Arizona	200	20,717 00	103 58	2	130 00	65 00
Army depot, New York	2	350 00	175 00	6	1,270 00	211 66
Army depot, Indiana				2	300 00	150 00
Army depot, District of Columbia	3	675 00	225 00	5	1,075 00	215 00
Army depot, Illinois				6	1,500 00	250 00
Army depot, Missouri	226	29,478 00	130 43	2	265 00	132 50
Total	1,006	111,744 80	111 07	29	5,330 00	183 79

The following is a tabular statement of the sales of public animals from the different departments and at general and other depots, showing number sold and amount realized:

Department or depot.	Horses.		Mules.		Total.	
	No.	Amount.	No.	Amount.	No.	Amount.
Department of the East	35	\$1,743 35	6	\$201 45	41	\$1,944 80
Department of the South	9	502 60	15	806 00	24	1,308 60
Department of Dakota	255	14,451 88	95	4,154 25	350	18,606 13
Department of the Missouri	273	5,930 86	157	7,137 80	430	13,068 66
Department of the Platte	257	12,837 75	71	2,789 90	328	15,627 65
Department of Texas	249	8,898 20	100	3,447 50	349	12,345 70
Department of California	23	920 75	9	505 00	32	1,425 75
Department of the Columbia	178	5,210 75	20	505 00	198	5,715 75
Department of Arizona	167	4,613 03	104	3,570 10	271	8,183 13
Department of West Point	9	187 50	2	18 00	11	205 50
Department of Arkansas	20	889 50	9	375 00	29	1,264 50
New York depot, New York	1	42 50			1	42 50
Washington depot, District of Columbia	11	314 00	4	83 00	15	397 00
Philadelphia depot, Pennsylvania	1	94 30			1	94 30
Saint Louis powder depot, Missouri			2	181 00	2	181 00
Total	1,487	50,877 37	594	23,850 60	2,081	74,727 97

SUMMARY.

The following is a summary of the number of animals purchased, sold, died, &c., during the fiscal year, and remaining on hand at its close:

On hand, purchased, &c.	Horses.	Mules.	Oats.
On hand July 1, 1880	10,704	10,732	20
Purchased	1,487	1,008	
Taken up, &c.	131	94	
Total to be accounted for	12,302	11,834	20
Sold	1,487	594	
Died	448	529	
Lost and stolen	123	156	
Total sold, died, &c.	2,058	1,281	
On hand June 30, 1881	10,244	10,553	20

FUEL, FORAGE, AND STRAW.

The issues of fuel during the fiscal year were as follows: Hard wood, 43,433 cords; soft wood, 76,855 cords; anthracite coal, 20,366 tons; bituminous coal, 19,020 tons.

The issues of forage and straw during the same period were: Corn, 674,012 bushels; oats, 832,918 bushels; barley, 224,047 bushels; bran, 67,891 bushels; hay, 55,293 tons; fodder, 31 tons; straw 2,723 tons.

The act of Congress approved February 24, 1881, provided "that there shall be no discrimination in the issue of forage against officers serving east of the Mississippi River, provided they are required by law to be mounted and actually keep and own their animals."

CONTRACTS.

There were filed in this office and examined during the fiscal year 823 contracts, as follows: 564 embracing 34,784,602 pounds of corn, 23,500,

1 pounds of oats, 9,953,000 pounds of barley, 907,600 pounds of bran, 867,970 pounds of hay, 6,090,084 pounds of straw, 100,755 cords of wood, 96,216,062 pounds of coal, 49,600 pounds of charcoal; 22 contracts for such quantities of fuel, forage, and straw as might be required; 65 for work upon national cemeteries; 65 for clothing, camp and garrison equipage; 8 for horses and mules; 4 for harness; 68 for transportation (including 1 for pack-mule service); 12 for buildings; 2 for Army wagons and ambulance wagons; 4 for stationery; 10 for building material; 5 for veterinary supplies; 1 for mineral oil; 3 for lamps; 25 for miscellaneous services, and 26 contracts of lease, and one charter party. The following mentioned General Orders, in relation to purchases and contracts, accompany the report, viz: Nos. 40-62 and 67 of 1880, and 33 and 63 of 1881, Headquarters of the Army, Adjutant-General's Office, marked K.

ESTIMATES AND REQUISITIONS.

Estimates for annual supplies and miscellaneous estimates and requisitions have been received and acted upon during the fiscal year as follows:

From Military Division of the Atlantic.....	263
From Military Division of the Missouri.....	248
From Military Division of the Pacific	80
From Military Division of the Gulf.....	68
From Department of West Point.....	17
From New York depot.....	4
From Philadelphia depot	27
From Jeffersonville depot.....	6
From Washington depot.....	12
From San Francisco depot	2
From miscellaneous sources	136
Total	863

WAGONS, AMBULANCES, AND HARNESS.

There were purchased during the year 245 six-mule Army wagons; 15 two-horse and four-horse or mule wagons; 42 spring-wagons; 3 spring truck-wagons; and 1 ambulance wagon, Army pattern (model). Of these there were purchased under contract, after inviting proposals by public advertisement, 225 six-mule Army wagons, at \$114.75 each, from Alexander Caldwell, of Leavenworth, Kans., contract dated September 6, 1880; 20 six-mule Army wagons, at \$200 each, from H. M. Black, of San Francisco, Cal., contract dated September 3, 1880; 125 two-horse and four-horse or mule wagons, at \$104.75 each, from Alexander Caldwell, of Leavenworth, Kans., contract dated September 6, 1880; 25 spring-wagons, Dougherty pattern, with Archibald iron hub, at \$173.50 each, from Alexander Caldwell, of Leavenworth, Kans.; 6 spring-wagons, Dougherty pattern, with Archibald iron hub, at \$208 each, from H. M. Black, of San Francisco, Cal.

The model ambulance wagon before mentioned was constructed according to modified specifications for ambulance wagon, Army pattern, copy of which, as finally approved by the honorable the Secretary of War, May 25, 1881, is herewith marked L.

The trials of the iron wagon running gears, referred to in report for last fiscal year, have not been attended with favorable results.

Thirty-five spring-wagons were furnished to posts and depots during the year.

There were purchased during the year, under contract, after inviting

proposals by public advertisement, 75 sets six-mule Army wagon harness, complete; 25 sets four-mule ambulance harness, complete; and 50 sets cart harness, as follows: 50 sets six-mule Army wagon harness complete, at \$65.50 per set, from B. S. Richards, of Leavenworth, Kans., contract dated September 6, 1880; 25 sets six-mule Army wagon harness, complete, at \$87 per set, from Jacob C. Johnson, of San Francisco, Cal., contract dated September 3, 1880; 25 sets four-mule ambulance harness, complete, at \$79.56 per set, from William Davis, of San Francisco, Cal., contract dated September 3, 1880; and 50 sets cart harness, at \$19 per set, from James Bennett, of Multanomah, Oreg., contract dated September 3, 1880.

The 75 sets six-mule Army wagon harness, complete, and the 100 sets four-mule ambulance harness, complete, referred to in report for last fiscal year as having been ordered manufactured at the military prison at Fort Leavenworth, Kans., in accordance with the orders of the honorable the Secretary of War, dated April 5, 1880, were delivered during the year. The cost of this harness was as follows: Six-mule Army wagon harness, \$83.07 per set, complete; four-mule ambulance harness, \$58.07 per set, complete.

Under the orders of the Secretary of War, communicated to this office by the Adjutant-General of the Army in letter of June 22, 1881, all harness for the Quartermaster's Department will be made at the military prison at Fort Leavenworth, and the Quartermaster's Department is to provide the necessary funds for the purchase of material and for other expenses incident to the manufacture.

FUEL.

The test of fuel referred to in reports for fiscal year ending June 30, 1879, and last fiscal year, has been continued at this office during the past year.

STOVES.

There were delivered to the Quartermaster's Department during the year by the Ordnance Department, 256 Army cast-iron heating stoves, regulation patterns, which had been manufactured at the Rock Island Arsenal, Ill., on request of this office. These included the 140 referred to in report for last fiscal year as having been ordered but not delivered. The cost of these stoves was as follows:

40 No. 1 heaters, \$9.68 each	\$387 20
46 No. 2 heaters, \$15.74 each	724 04
44 No. 3 heaters, \$20.35 each	895 40
70 No. 6 heaters, \$8.86 ² / ₅ each	620 22
56 No. 7 heaters, \$19.66 each	1,100 96
Total	3,727 82

On April 21, 1881, request was made by this office upon the Chief of Ordnance for 275 Army cast-iron heating stoves (81 No. 1, 63 No. 2, 4 No. 3, 80 No. 6, and 47 No. 7), but they have not yet been delivered.

The Ordnance Department also manufactured at the Rock Island Arsenal for the Quartermaster's Department, on request of this office, various parts (grates, rods, feet, &c.) for repair of Army cast-iron heating stoves.

The specifications for Army cast-iron coal heater No. 7, published in circular from this office of May 25, 1876, have been amended so as to provide for a grate that can be shaken and cleaned. A copy of the circular from this office of March 1, 1881, publishing this amendment, is

herewith, also copy of specifications for furniture for the Army cooking ranges Nos. 1 and 2, and the modification thereof dated September 3, 1879, marked M.

LIGHTS.

In obedience to the orders of the Secretary of War of June 24, 1879, a board of officers was convened at Fort Columbus, New York Harbor, by Special Orders No. 26, dated June 30, 1879, from Headquarters Military Division of the Atlantic, to examine into and report upon the subject of lighting barracks with oil. Upon the report of this board and the recommendation of this office the Secretary of War authorized the introduction of the system of lighting with mineral oil at certain military posts, as an experiment, August 25, 1880.

Under this authority proposals were invited for furnishing a supply of mineral oil having a flash point not lower than 135° Fahrenheit, and pendant two-burner lamps, by public advertisement dated October 4, 1880. Of the samples of lamps submitted by the bidders under this advertisement, three different patterns were selected, viz: One of brass, costing \$3, submitted by John F. Donnell, of New York City; one of bronze, costing \$6.25, submitted by R. Hollings & Co., of Boston, Mass.; and one of brass (made according to drawings prepared at this office and furnished bidders on application), costing \$4.40, submitted by the Manhattan Brass Company of New York City; ten thousand gallons of oil of the standard mentioned and 133 lamps of each pattern were purchased and distributed to various posts in different sections of the country for the experiment.

The act approved February 24, 1881, making appropriations for the Army for the fiscal year ending June 30, 1882, embraces the item of lights for the Army under the appropriation for the Quartermaster's Department for "Regular Supplies," the item being introduced into the estimate submitted by this office on the recommendation of the Quartermaster-General, approved by the Secretary of War.

Subsequently, General Orders No. 50, Headquarters of the Army, Adjutant-General's Office, May 24, 1881 (copy herewith, marked N.), was issued, publishing regulations for the supply by the Quartermaster's Department of all lights heretofore supplied by the Subsistence Department, except as thereafter provided.

As the result of the experimental trials of the lamps and oil distributed to various posts as hereinbefore stated, the brass lamp submitted by the Manhattan Brass Company, made according to drawings prepared at this office, and styled the "Army pattern," has, with certain modifications, been adopted for use in the Army, both with single burner and with double burner, the single-burner lamp having only one branch or arm and being used in a bracket.

A copy of the specifications and drawings of the lamps, reflectors, brackets, and various parts of the lamps, is herewith, marked, O.

Steps have been taken for supplying the Army in accordance with the provisions of General Orders No. 50, hereinbefore mentioned.

EXPLORING EXPEDITIONS.

Under General Orders No. 35, Headquarters of the Army, Adjutant-General's Office, dated April 12, 1881 (copy herewith, marked P), the Quartermaster's Department furnished during the year supplies for the exploring expedition under First Lieut. A. W. Greely, Fifth Cavalry, acting signal officer.

IRON-HUBBED WHEELS.

Trials of iron-hubbed wheels have been continued during the year.

MISCELLANEOUS.

Herewith, marked Q, are specifications for horse blankets, saddle blankets, pack-saddle blankets, paulins (large), and wagon paulins, which have been approved and published by this office.

MISCELLANEOUS CLAIMS AND ACCOUNTS.

At the beginning of the fiscal year 12,911 claims, amounting to \$6,965,673.42, and 364 accounts, in amount \$68,702.58, were on file; in the aggregate 13,275 claims and accounts, amounting to \$7,034,376.00; during the year 820 were received, amounting to \$184,472.04; total claims and accounts, \$7,218,848.04.

Forty-four claims were approved for \$2,121.63, being a deduction in the amount as originally presented of \$2,208.76; 255 claims, amounting to \$35,644.17 were referred to other departments; 155 claims were referred to the Third Auditor of the Treasury for action of the accounting officer amounting to \$25,087.72; 148 claims, amounting to \$42,321.60, were rejected; 186 accounts, amounting to \$13,554.20, were approved, being a deduction in the amount as presented of \$239.30; 348 accounts were referred to other departments to which they pertained, amounting to \$84,185.19; 20 accounts, amounting to \$3,224.28, were rejected; total disposed of, 1,156 claims and accounts, amounting, as presented, to \$208,586.85; 12,707 miscellaneous claims and 232 accounts remain on file, amounting to \$7,010,261.19.

It will be observed from the foregoing exhibit that the number and amount of miscellaneous claims on hand at close of the fiscal year, in comparison with those of the previous year, has been diminished.

The numbers of these claims and accounts received during each fiscal year have, heretofore, been in excess of the numbers disposed of during the same time, but the statement appended to the report shows that the number of claims and accounts disposed of during the year exceeds the number received by several hundred.

During the past year there has been no diminution in the number and variety of questions of a miscellaneous character, relating to the subjects of quarters, fuel, forage, mileage, extra duty, reimbursements, eight-hour law, &c., presented for instructions and decision.

It is the duty of this branch to answer these inquiries and furnish the data on which the necessary instructions to officers and others are given by the Quartermaster-General.

The official postage-stamps of the War Department are supplied under instructions emanating directly from this branch to all officers of the Quartermaster's Department.

During the past fiscal year official postage-stamps equal in value to \$29,952.43 have been supplied to officers of the department upon proper requisition therefor.

The various forms of quartermaster's blanks used by officers in the rendition of their accounts, together with books of record, &c., are supplied under instructions from this branch. In the past year 2,136 requisitions for these blanks, books, &c., have been received, briefed, recorded, and examined, and proper action taken thereon.

The amount estimated by this office for incidental expenses of the Quartermaster's Department, during the fiscal year 1880-1881, was \$1,000,000. The Secretary of War recommended this amount, and Congress appropriated \$1,000,000.

This sum was found inadequate to meet all demands under that head, and in March, 1881, in order to keep within the amount appropriated for the fiscal year ending June 30, 1881, it became necessary to make

actions in the number and pay of clerks, agents, extra-duty agents investigating claims. Reductions are manifestly injurious, crippling and delaying work imposed upon the department, and to provide against them are an increase in the estimates will be required, as upon the annual recurrence of Indian outbreaks large expenditures unappropriation for "Incidental Expenses" are made for payment scouts, interpreters, &c. of Congress of March 3, 1881, the sum of \$15,260 was appropriated as deficiency for payment for horse and mule shoes, nails, &c., army. The cost of these articles is estimated yearly, and to be for from the appropriation for "Incidental Expenses," at about

Following statements exhibit the number and amount of transports and accounts and miscellaneous claims and accounts on July 1, 1881, the number and amounts of those received and the number and amounts of those acted upon during the fiscal year ending June 30, 1881, and those remaining on hand.

Accounts and claims in the transportation branch, Quartermaster-General's Office, for fiscal year ending June 30, 1881.

	Number.	Amount.	Number.	Amount.
claims suspended and awaiting action.	405	\$697, 447 07		
acted during the fiscal year	1, 402	1, 737, 083 77		
and during the fiscal year	121	234, 321 99		
claims and claims on hand and received			1, 928	\$2, 668, 852 83
referred for settlement in the fiscal year	1, 237	1, 152, 695 08		
and for settlement in the fiscal year	70	104, 802 53		
claims rejected in the fiscal year	84	77, 668 22		
claims suspended in the fiscal year	49	64, 479 37		
claims and claims referred, rejected, and sus-			1, 440	1, 399, 645 20
pending action July 1, 1881	422	1, 181, 615 11		
pending action July 1, 1881	66	87, 592 52		
Number and amount			488	1, 269, 207 63

miscellaneous claims and accounts in the Quartermaster-General's Office for the fiscal year ending June 30, 1881.

	Number.	Amount.	Number.	Amount.
July 1, 1880, which had previously been acted or had received no decisive action—				
1861		\$6, 965, 673 42		
1864		68, 702 58		
	13, 275	\$7, 034, 376 00		
claims received during the fiscal year	398	86, 669 85		
accounts received during the fiscal year	422	97, 802 19		
on hand and received			14, 095	\$7, 218, 848 04
acted	44	2, 121 63		
referred to other departments	255	35, 644 17		
claims approved		2, 208 76		
referred to Third Auditor for action of ac-				
counters	155	25, 087 72		
acted	148	42, 321 60		
received	186	13, 554 20		
accounts approved		239 30		
referred to other departments	348	84, 185 19		
acted	20	3, 224 28		
on which final action has been taken			1, 156	208, 586 85
on hand July 1, 1881—				
.....	12, 707	6, 944, 959 39		
.....	232	65, 301 80		
Number and amount			12, 939	7, 010, 261 19

The following-described papers accompany this report:

- A.—Statement of all troops and property transported under the direction of the Quartermaster's Department during the fiscal year ending June 30, 1881.
- B.—Statement showing principal movements of troops during fiscal year, and average length of march or movement in each case.
- C.—General Orders No. 69, Adjutant-General's Office, of 1880 publishing table of land-grant railroads.
- D.—General Orders No. 57, Adjutant-General's Office, of 1881 publishing extract of laws relating to land-grant railroads.
- E.—Abstract of contracts made by officers of the Quartermaster's Department for wagon transportation during the fiscal year.
- F.—Abstract of contracts for water transportation for the fiscal year ending June 30, 1881.
- G.—Statement of vessels owned and purchased by the Quartermaster's Department during the fiscal year.
- H.—Statement of vessels chartered, impressed, or employed by the Quartermaster's Department during the fiscal year.
- I.—Statement of the indebtedness of southern railroad companies for railway material for the fiscal year ending June 30, 1881.
- K.—General Orders Nos. 40, 62, and 67, Adjutant-General's Office, of 1880; and Nos. 33 and 63, Adjutant-General's Office, of 1881.
- L.—Specifications for ambulance wagon, Army pattern.
- M.—Circular publishing amendment to specifications for Army iron coal-heater, also specifications for furniture, &c., for company ranges.
- N.—General Orders No. 50, Adjutant-General's Office, of 1881 publishing regulations for the supply of lights to the Army.
- O.—Specifications and drawings of lamps, reflectors, brackets, and various parts of the lamps.
- P.—General Orders No. 35, Adjutant-General's Office, of 1881, supplementary for exploring expedition under Lieut. A. W. Greely.
- Q.—Specifications for horse blankets, saddle blankets, pack-saddles, blankets, paulins, and wagon paulins.

I am, general, very respectfully, your obedient servant,
J. G. CHANDLER,
Deputy Quartermaster-General, United States Army.
Brig. Gen. M. C. MEIGS,
Quartermaster-General, United States Army.

A.—Statement of all troops and property transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1881.

Kind of transportation.	Passengers.			Beasts.		
	Officers.	Men.	Total.	Horses.	Mules.	Cattle.
Railroad.....	1, 842	30, 978	32, 820	4, 418	4, 364	.....
Water.....	434	8, 208	8, 642	1, 179	394	.....
Wagon.....	24	125	149	.....	.....	.....
Stage.....	1, 192	3, 855	5, 047	.....	.....	.....
Grand total	3, 492	43, 166	46, 658	5, 597	4, 758	.....

A.—Statement of troops and property transported, &c.—Continued.

Kind of transportation.	Stores.					
	Subsistence	Quartermaster's.	Ordnance.	Medical.	Miscellaneous	Total.
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
Railroad	44,478,898	100,417,087	9,195,943	1,511,768	11,417,808	167,020,802
Water	12,040,460	15,815,752	6,710,961	408,920	2,838,494	37,362,587
Wagon	19,528,178	31,313,600	2,107,997	861,440	15,946,470	68,856,583
Stage	741	3,505	720	98	19,674	24,744
Grand total	76,097,776	147,548,644	18,015,627	2,780,224	28,822,246	273,264,716

Respectfully submitted.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. A.

B.—Table showing principal movements of troops during fiscal year ending June 30, 1881, and average length of march or movement in each case.

Organization.	Company.	From—	To—	Stations before movement.	Stations after movement.	Distance.	Average length of march or movement in each case.
Third Cavalry.....	C	Department of the Platte	Department of the Missouri	Fort D. A. Russell, Wyo.....	White River, Colo.....	Miles. 315	291
	G	do	do	do	Hot Sulphur Springs, Colo.....	242	
	L	do	do	do	White River, Colo.....	315	
	E	Department of Texas	Department of the South	Fort Brown, Tex.....	Little Rock, Ark.....	1,270	
	G	do	do	do	do	1,270	
Second Artillery.....	L	do	do	Fort Clark, Tex.....	Jackson Barracks, La.....	1,701	1,080
	Headq's	Department of the Missouri	Department of Texas	Fort Riley, Kans.....	San Antonio, Tex.....	983	
	A	do	do	do	Fort Concho, Tex.....	766	
	B	do	do	Fort Reno, Ind. T.....	do	363	
	C	do	do	Fort Riley, Kans.....	do	766	
Sixteenth Infantry.....	D	do	do	Fort Gibson, Ind. T.....	Fort Davis, Tex.....	732	705
	E	do	do	Fort Sill, Ind. T.....	do	536	
	F	do	do	Fort Wallace, Kans.....	Fort Concho, Tex.....	602	
	G	do	do	do	do	602	
	H	do	do	Fort Riley, Kans.....	San Antonio, Tex.....	983	
	I	do	do	Fort Reno, Ind. T.....	Fort Stockton, Tex.....	740	
	K	do	do	Fort Sill, Ind. T.....	do	675	
	Headq's	Department of Texas	Department of the Missouri	Fort Davis, Tex.....	Fort Supply, Ind. T.....	532	
	A	do	do	do	do	532	
	B	do	do	do	Fort Sill, Ind. T.....	536	
Twenty-fourth Infantry....	C	do	do	do	do	536	608
	D	do	do	Fort McIntosh, Tex.....	do	678	
	E	do	do	do	Fort Reno, Ind. T.....	743	
	F	do	do	do	North Fork of Canadian River.	808	
	G	do	do	Fort Concho, Tex.....	Fort Supply, Ind. T.....	672	
	H	do	do	Fort Davis, Tex.....	Fort Elliott, Tex.....	445	
	I	do	do	Fort Stockton, Tex.....	Fort Sill, Ind. T.....	675	
	K	do	do	Fort Concho, Tex.....	do	522	

Respectfully submitted.

J. G. CHANDLER
Deputy Quartermaster.

C.

[General Orders No. 69.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
 Washington, September 30, 1880.

Section of the Secretary of War the following instructions, and accompanies (Nos. 1 to 5, inclusive) of land-grant and bonded railroads, revised and to date, are published for the information and guidance of all concerned.

No. 1 gives the names of the companies now operating the land-grant and roads; the former names of the roads; the termini of the land-grant and roads; the dates of the laws (statutes and pages) relating to the roads and the conditions of the grants in respect of the use of the roads for the transportation of the troops and property of the United States.

No. 2 contains a list of all the railways named in Table No. 1 to which the bonds were made on condition that the companies owning or operating the roads transport the troops and property of the United States over said roads free of charge, or expense to the United States.

No. 3 contains a list of all the railroads named in Table No. 1 to which the bonds were made on the condition that "said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge in the transportation of any property or troops of the United States," and payment for such transportation is forbidden by the act of March 3, 1875, in the following words, to wit: "*Provided*, That no money shall hereafter be paid to any company for the transportation of any property or troops of the United States over any railroad which, in whole or in part, was constructed by the aid of a grant from the Government of the United States, and on the condition that such railroad should be a public highway for the use of the Government of the United States, free from toll or other charge, or upon any other conditions, for the use of such road for such transportation; nor shall any payment be made for the transportation of officers of the Army over any such road except as provided by law, and under orders as military officers of the United States. But nothing contained herein shall be construed as preventing any such railroad from bringing a suit in the Court of Claims for the charges for such transportation, and recovering for the same if found entitled thereto by virtue of the laws in force prior to the passage of the act of March 3, 1875: *Provided*, That the claim for such charges shall not have been barred by the expiration of limitations at the time of bringing the suit; and either party shall have the right of appeal to the Supreme Court of the United States: *And provided further*, That the foregoing provisions shall not apply for the current fiscal year, nor thereafter, until the sole condition of transportation is that the company shall not charge higher rates than they do individuals for like transportation, and the Quartermaster-General shall be satisfied that this condition has been complied with."

The Supreme Court, in the cases of the Atchison, Topeka and Santa Fé and Superior and Mississippi (now the Saint Paul and Duluth) Railroads, decided, in 1875, that the decision applies with equal force to all the railroads named in Table No. 3, and that the reservation in question secures to the government only a free use of the roads for the transportation of troops and property of the government, and that it does not prevent the government from having its troops and property transported by the company over the respective railroads free of charge for transporting the same." * * * The companies are entitled to compensation for all transportation performed by them, for the use of troops and property of the government, subject to a fair deduction for the use of their respective railroads." But notwithstanding this decision the Quartermaster's Department cannot pay for the transportation of any property or troops of the United States over any of the railroads named in Table No. 3, so long as the provisions of the act of March 3, 1875, above quoted, remain unrepealed or unaltered.

No. 4 contains a list of all the railroads named in Table No. 1 to which bonds were made, but upon conditions which, in one way or another, require full compensation to be made for all transportation services rendered by the companies owning or operating the roads. The compensation due from time to time to the Pacific Railroad Companies, to which bonds of the United States were made (see Table 5), is, however, withheld and applied by the Secretary of the Treasury to the interest and principal of said bonds.

No. 5 contains a separate list of the bonded Pacific railroads and their operated lines. The compensation due from time to time to these Pacific railroads is withheld and applied, as above stated, under the acts of July 1, 1862, March 3, 1873, and May 7, 1878; but the compensation due for transportation over their leased and operated lines is withheld in pursuance of the opinion of the Secretary of War.

the Attorney-General of February 24, 1874, and opinion of June 18, 1880, hereto appended.

7. In order that the requirements of the laws in respect of these land-grant and bonded railroads may be observed and fully complied with, officers of the Quartermaster's Department, in providing transportation, will, for convenience in settling accounts of these railroads, issue separate requests and separate bills of lading to each of the bonded Pacific railroads for all transportation required over them. The practice of issuing separate requests and separate bills of lading for all transportation over the Omaha bridge, when service over other portions of the Union Pacific Railroad is involved, will be discontinued.

8. Separate requests and separate bills of lading will be issued for all transportation required over the land-grant railroads which are required by law to transport the troops and property of the United States over said railroads free of cost, charge, or expenses to the United States (see Table No. 2), and for all transportation required over the railroads to which payment for the transportation is forbidden by the act of March 3, 1875 (see Table No. 3), except in cases provided for in the next succeeding paragraph.

9. When transportation for passengers or freight is required over two or more railroads (whether land-grant or not) forming a through line, or where arrangements have been made for through transportation at through rates, a single request or single bill of lading will be issued therefor in all cases where practicable, except as provided in paragraphs 7 and 8.

10. Whenever transportation is required over a land-grant railroad subject to any of the conditions, restrictions, or provisions of law named in paragraphs 3 and 4 of this order, the initial letters or full name of the land-grant road, the fact that it is a land-grant road and is required by law to transport the troops and property of the United States free of cost, charge, or expense to the United States, or that payment for the transportation is forbidden by law, will be stated on the request or bill of lading issued for the service.

11. In cases where it is not practicable to procure the necessary transportation on a single bill of lading over several railroads forming a through line and having a through rate, separate requests and separate bills of lading may be issued to the several portions of the through line; but officers will be particular to state in each request and bill of lading so issued, whether to land-grant or bonded railroads, or otherwise, the points of original departure and final destination of the persons or stores to be transported; and officers settling accounts for such service will be particular to note the points of original departure and ultimate destination, as stated in the request or bill of lading, and will only allow each road its proportion of such through rate, it being understood that the authority to issue separate requests and separate bills of lading in such cases is given merely to facilitate settlement with all the roads for the services rendered. The government does not in any manner derive any benefit therefrom; and the fact that separate requests and separate bills of lading are issued in such cases does not entitle any of the roads to local rates when through rates exist, the government being at all times legally and justly entitled to the lowest rates offered the public for similar service.

12. Whenever circumstances render necessary the issue of separate requests and separate bills of lading to each of several roads forming a through line and having a through rate, or where special rates have been secured for the transportation, the proportion of the through or special rate inuring to each road, land-grant or otherwise, will, when known, be stated on each request or bill of lading so issued.

13. Special rates will not be accepted for transportation over a line of roads any one of which is a land-grant road and subject to the conditions and provisions of law named in paragraphs 3 and 4 of this order, unless the rates offered are lower than the regular tariff rates with all land-grant deductions. When such rates are offered, it should be specifically stated in the proposition that the proportion inuring to the land-grant road (which should be definitely fixed and stated) has been deducted, and that the rate proffered is payable for the service over the remaining portion of the route exclusively. Any proposition that does not conform to the requirements of this paragraph will not be accepted.

14. Under the authority given in paragraph 54 of General Orders No. 92, A. G. O., of 1872, to purchase tickets when transportation is required from one part of the country to another, officers are instructed not to purchase tickets for transportation over any of the bonded Pacific railroads, nor over any of the land-grant roads named in Tables Nos. 2 and 3, appended to this order.

15. Payment will not be made for the transportation of any property or troops of the United States over any of the railroads named in Tables Nos. 2 and 3. Accounts for transportation over such railroads exclusively, if presented for payment, will be returned to the person presenting them, with a statement of the reasons why payment cannot be made for the service.

16. Officers settling accounts which include transportation over such land-grant

da, and over other roads to which payment is not forbidden by law, will withhold yment of the amount inuring to the land-grant road, deducting the same on the ucher at time of making settlement, and will issue a certificate for that amount, in plicate, as follows:

I. — _____, _____, 18—. I certify that in settlement with the _____ (name the railroad company) _____ ilroad company for _____ (passenger or freight) _____ transportation, voucher _____, Abstract B, of my disbursing accounts for _____, 18—, I withheld the sum of _____ dollars and _____ cents, it being the amount inuring on that settlement to _____ (name the land-grant road) _____ railroad company for transportation _____ its road, as per subvouchers, Nos. _____, attached to said voucher. The said _____ (name the road) _____ is a land-grant railroad, and is required by _____ to transport the troops and property of the United States free of cost, charge, or _____ pense to the United States; therefore payment of the amount withheld will not be _____ de.

The transportation was performed in the following named months, to wit:

_____, 18—, \$_____;	_____, 18—, \$_____
_____, 18—, \$_____;	_____, 18—, \$_____
_____, 18—, \$_____;	_____, 18—, \$_____

Original.)

Quartermaster, U. S. A.

If the amount is withheld because payment thereof is forbidden by law, in lieu of words "and is required by law to transport the troops and property of the United States free of cost, charge, or expense to the United States," &c., say "and payment the amount withheld is forbidden by law."

NOTE.—In stating the date on which the transportation was furnished, be governed the date of the certificate on the request of the party transported, and by the certificate of shipment in the bill of lading; and in giving the amount withheld, give only amount for services over the land-grant road, and not the full amount represented the voucher. The certificate can be used in settling accounts which include transportation over the bonded Pacific railroads by making the necessary alterations.

7. The original of this certificate will be sent to the company operating the land-grant road over which the transportation covered by the certificate was furnished, and will be accepted by the government as evidence of service rendered, in place of original request or bill of lading; the duplicate of the certificate will be given to the railroad company with which settlement is made, for use in settlement with its connecting lines.

18. Payment may be made to any land-grant railroad company for transportation over any other road not land-grant, or to which payment is not forbidden by law or regulations, when the land-grant company is, in the ordinary course of business, entitled to collect the freight or passage money. Payment may also be made to any land-grant railroad company for transportation over any portion of its road, or branch roads, or leased or operated lines, to which payment is not forbidden by law or regulations.

19. In conformity to the decision of the Second Comptroller of the Treasury of July 1874, authority is given for the reimbursement of the actual cost of transportation over the land-grant roads named in Tables Nos. 2 and 3, of persons not of the Army (civilians hired) holding appointment or employment under the United States, when on duty and traveling under orders at government expense, whenever it is impracticable to furnish such persons with the necessary transportation request.

20. In settlement of accounts for transportation over a railroad or line of railroads controlled and operated by one company, even though composed by the consolidation, lease, or otherwise of several roads, a part only of which is land-grant and subject to the conditions named in paragraphs 3 and 4 of this order, the amount to be withheld on account of land-grant (for which certificate is to be issued), and the amount to be paid for the transportation over that portion of the road not subject to any of said conditions, will be apportioned according to their respective distances, the rate for the whole distance the troops or stores are carried being the rate at which settlement will be made; and in no case arising under this paragraph will a certificate be issued for a greater amount than the amount due on a strictly mileage basis.

21. For transportation at through rates over a line of roads controlled and operated by several companies, one or more of which is a land-grant road and subject to the conditions named in paragraphs 3 and 4, the amount to be withheld on account of the land-grant road will be the proportion (agreed upon by the companies operating the several roads) inuring to the land-grant road, which proportion should be ascertained by the officers before settlement of the account is made. If the railroad companies refuse to state the proportions agreed upon, the amount withheld will be apportioned on a mileage basis, and the reasons why it was so apportioned will be stated on the voucher.

22. Accounts for transportation over the bonded Pacific railroads, including the Omaha bridge, and all lines owned, leased, or controlled by said Pacific railroads, will be presented for adjustment to the quartermasters designated for that duty, who will forward them, properly prepared and certified, to the Quartermaster-General for examination and reference to the accounting officers of the Treasury. No payments will be made by officers of the Army for transportation of any kind over these roads.

23. In settlement of accounts which include transportation over these Pacific railroads, and over other railroads to which payment for the service is not forbidden by law or regulations, officers will issue the certificate provided in paragraph 16, for the full amount inuring to the Pacific Railroad, the several copies of which will be disposed of in the manner required by paragraph 17. The certificate will show that the road is a bonded road, and that payment of the amount is withheld in pursuance of regulations which require settlement for the service to be made by the Treasury Department.

By command of General Sherman :

R. C. DRUM,
Adjutant-General.

[General Orders No. 56.]

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, July 1, 1880.

By direction of the Secretary of War, the following circular from the Treasury Department, concerning transportation services performed by Pacific Railroad Companies, is published for the information of all concerned:

TREASURY DEPARTMENT,
Washington, D. C., June 24, 1880.

The following opinion of the Attorney-General, in relation to withholding payment from Pacific Railroad Companies for transportation services performed for the government, is published for the information of all concerned.

H. F. FRENCH,
Acting Secretary.

DEPARTMENT OF JUSTICE,
Washington, June 18, 1880.

Hon. JOHN SHERMAN,
Secretary of the Treasury:

SIR: Yours of the 7th ultimo refers to me certain questions suggested by the Quartermaster-General, to each of which I subjoin my answer in the order of presentation.

"1st. Shall all compensation due for transportation services rendered for the Quartermaster's Department over those portions of the Union and Central Pacific Railroads which were built by aid of government bonds be withheld?"

Answer. Yes. The second section of the act of May 7, 1878, chapter 96, expressly declares: "SEC. 2. That the whole amount of compensation which may, from time to time, be due to said several railroad companies, respectively, for services rendered for the government, shall be retained by the United States," &c. (20 Stat., 58). This act was intended to change the pre-existing law, and could hardly be made more explicit.

"2d. Shall full compensation be made for all transportation services rendered for the Quartermaster's Department over those portions of roads owned, leased, controlled, and operated by said Union and Central Pacific Railroad Companies which were not built by aid of government bonds, or shall all compensation due for such services be withheld?"

Answer. Though the Supreme Court held, in *United States vs. Kansas Pacific Railway Company* (99 U. S., 455), that the bonds issued to that corporation are not a lien beyond the 100th meridian, nor is the company liable for five per cent. of its earnings beyond that point, yet, in the following case, *United States vs. Denver Pacific Railway Company* (99 U. S., 460), the court, in a note, based its exemption of the road from liability to have its compensation for government transportation withheld upon the fact that the company (Denver Pacific Railway Company) was not indebted to the United States. The Central and Union Pacific Railroad Companies, owning, leasing, controlling, and operating the branches referred to in this inquiry, are indebted to the United States upon subsidy bonds. In this state of the decisions, I advise the retention of all compensation to these roads for services upon such branches, so that the question can be judicially determined.

"3d. Shall all compensation due for transportation services rendered for the Quarter-

Department over that portion of the Kansas Pacific Railroad—393½ miles—
as built by aid of government bonds, *or only one-half of such compensation, be
it*”

. All compensation should be withheld over the entire length of this road,
vised Statutes, section 5260, still in force, which declares:

ecretary of the Treasury is directed to withhold all payments to any railroad
and its assigns, on account of freights or transportation over their respective
any kind, to the amount of payments made by the United States for interest
ds of the United States issued to any such company, and which shall not
be reimbursed, together with the five per centum of net earnings due and
to be paid, as provided by law.”

Shall any part, and, if so, what part, of the compensation due for transpor-
tation services rendered for the Quartermaster's Department over that portion of said
Kansas Pacific Railroad—244 miles—which was built without aid of government
bonds, be withheld?”

. For reasons indicated in my reply to your second question, I think *all* com-
pensation should be withheld as to this portion of that road, as well as to that in aid
of bonds issued.

5th question states that the Kansas Pacific and Denver Pacific have been con-
sidered with the Union Pacific, and asks if payment for services over these lines
should be withheld and applied to the debt of the Union Pacific.

. As stated in the second answer, the compensation should be entirely with-
held unless otherwise directed by the court, because the Kansas Pacific Railway Com-
pany is indebted for interest paid by the United States upon its subsidy bonds. (R. S.,
sec. 5260.)

Shall all compensation due for transportation for the Quartermaster's Depart-
ment over those portions of the Sioux City and Pacific and the Central Branch Union
Pacific Railroads, which were built by aid of government bonds, be withheld, *or shall
only one-half of such compensation be withheld?*”

r. All; because derelict in payment of interest. (R. S., sec. 5260.)

Shall any part, and, if so, what part, of the compensation due for transpor-
tation services rendered for the Quartermaster's Department over lines owned, leased,
and operated by said Sioux City and Pacific and Central Branch Union
Pacific Railroad Companies, which were not built by aid from government bonds, be
withheld?”

r. All; for reasons indicated in the second answer. (R. S., sec. 5260.)

If these corporations appear to be affected by the act relating to the compen-
sation of roads which received grants of land upon the condition of a free use of the
land, of course considerations additional to those above suggested would arise as
to each company.

Orders of the Secretary of War and of the Quartermaster-General are herewith
issued, as requested.

I am, very respectfully, your obedient servant,

CHAS. DEVENS,
Attorney-General.

Command of General Sherman :

R. C. DRUM,
Adjutant-General.

12 W

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, giving present and original names, termini, length of each road (where completed), conditions of the grants—extracts from the laws having reference to the use of the roads by the United States in the transportation of troops and property, with date of each law, and volume and page of statute.

[The following table of land grant and bonded railroads, compiled from the statutes of the United States, records of the General Land Office, and other official sources, is published for the information of all concerned.]

Number.	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made	Termini of land-grant and bonded portions of the roads.		Corresponding No. in succeeding tables.	Extracts from the laws relating to land-grant and bonded railroads.		Conditions of grant, so far as relates to the use of the road by the United States.
		From	To—Miles.		Dates of laws.	Length of road in miles.	
1	ALABAMA AND GREAT SOUTHERN R.R. (Formerly the Wills Valley and Northeastern and Southwestern; and Alabama and Chattanooga—Alabama.)	Waubatchie, Tenn.	State line, Mississippi and Alabama 370 1/2	1	June 3, 1856 Apr. 10, 1867 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	11 17 16 45 18 74 18 453 21 300	"Said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of June 3, 1856, section 3.
2	ATCHISON, TOPEKA AND SANTA FE—Kansas.	Atchison, Kans.	State line, Kansas and Colorado. 470 1/2	2	Mar. 3, 1863 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	12 772 14 74 14 453 21 300	"Said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of March 3, 1863, section 3.
3	ATLANTIC, GULF AND WEST INDIA TRANSIT. (Formerly the Florida Railroad—Florida.)	Fernandina, Fla.	Cedar Key, Fla. 155	3	May 17, 1856 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	11 15 18 74 14 453 21 300	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of May 17, 1856, section 3.
4	BURLINGTON AND MISSOURI RIVER, in Nebraska.	Plattsmouth, Nebr.	Kearney Junction, Nebr. 190 1/2	1	July 2, 1864 Apr. 10, 1869 May 6, 1870 July 1, 1872 July 2, 1874 Mar. 3, 1875 May 21, 1876 July 2, 1878	13 364 16 54 16 114 12 489 18 356 13 504 14 356 14 79	No conditions.
5	CENTRAL PACIFIC, including the Western Pacific—Main Line.)	Ogden, Utah	San José, via Sacramento, Lathrop, Tracy, and Niles. 808 1/2	2	July 2, 1864 Apr. 10, 1869 May 6, 1870 July 1, 1872 July 2, 1874 Mar. 3, 1875 May 21, 1876 July 2, 1878	13 364 16 54 16 114 12 489 18 356 13 504 14 356 14 79	"And be it further enacted, That the grants aforesaid are made upon the condition that said company shall keep said railroad and telegraph line in repair and use, and shall at all times transmit dispatches over said telegraph line, and transport mail, troops, munitions of war, supplies, and public stores upon said railroad for the Government, whenever required to do so by any department thereof, and that the Government shall at all times have the

appears that the net earnings of the entire road and telegraph including the amount allowed for services rendered forth, United States, after deducting all expenditures, including repairs, and the furnishing, running, and managing of said road, shall exceed ten per centum upon its cost, exclusive of the five per centum to be paid to the United States, Congress may reduce the rates of fare thereon, if unreasonable in amount and may fix and establish the same by law. . . . and may, at any time, having due regard for the rights of said companies named herein, add to, alter, amend, or repeal this act. — *Ibid*, section 18.

And that only one half of the compensation for services rendered for the government by said companies shall be required to be applied to the payment of the bonds issued by the government in aid of the construction of said roads. — *Act of July 2 1864 section 5.*

* It is understood that this road is about to be consolidated with the Chicago, Burlington and Quincy Railroad, of Iowa.

† This road is a bonded road as well as a land-grant road. The earnings of the road from government transportation are retained on account of the bonds issued by the United States to the road, and not on account of the land-grant. Five miles of the road from Ogden, west, were built by the Union Pacific Railroad Company, but are operated by the Central Pacific Railroad Company under a lease.

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number.	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made.	Termini of land-grant and bonded portions of the roads.		Corresponding No. in succeeding tables.	Extracts from the laws relating to land-grant and bonded railroads.			Conditions of grant, so far as relative to the use of the road by the United States.
		From—	To—		No.	Table.	Dates of laws.	
5	CENTRAL PACIFIC—Continued			2		4		of the road or business of any or of either of said companies, or adverse to the road or business of any or either of the others. — <i>Ibid.</i> , section 15. "The Secretary of the Treasury is directed to withhold all payments to any railroad company and its assigns, on account of freights or transportation over their respective roads of any kind to the amount of payments made by the United States for interest upon bonds of the United States issued to any such company, and which shall not have been reimbursed together with the five per centum of net earnings due and unsupplied, as provided by law."—Section 5260, R. S. "That the whole amount of compensation which may, from time to time, be due to said several railroad companies respectively for services rendered for the government shall be retained by the United States, one half thereof to be presently applied to the liquidation of the interest paid and to be paid by the United States upon the bonds so issued by it as aforesaid to each of said corporations severally and the other half thereof to be turned into the sinking fund hereinafter provided for the uses therein mentioned. Act of May 7, 1878, section 2. "And be it further enacted, That the grants aforesaid are made upon the condition that the said companies shall keep said railroad
6	CENTRAL PACIFIC—Oregon Division. (Formerly Central Pacific and Southern	Junction with Central Pacific Railroad.	Southern boundary of Oregon.	1		2	July 25, 1869 June 25, 1908 Apr 10, 1909	230 40 47

14

CHICAGO AND NORTHWEST
R.R.—Iowa Division. (For
merly Cedar Rapids and
Missouri River—Iowa.)

Cedar Rapids, Iowa.

Transfer grounds
Union Pacific Rail-
road.

371 1/2

7

3

May 15, 1856 11
June 2, 1864 18
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21
Mar. 3, 1877 11
Mar. 3, 1878 13
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21

15

CHICAGO AND NORTHWEST
R.R.—Minnesota Division
(Formerly the Winona and
Saint Peter—Minnesota.)

Winona, Minn.

A point on the Big
Sisoux River 10 1/2
miles east of Lake
Kamposka Station.

323 1/2

8

3

Mar. 3, 1857 11
Mar. 3, 1865 13
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21

16

CHICAGO AND NORTHWEST
R.R.—Milwaukee Green
Bay and Marquette Line
(Formerly Chicago Saint
Paul and Fond du Lac, of
Wisconsin and Bay de
Nouquet and Marquette of
Mich.)

Fond du Lac, Wis.

Marquette, Mich.

254 1/2

9

3

June 3, 1856 11
June 3, 1856 11
Apr. 25, 1862 12
July 5, 1862 12
Mar. 3, 1863 13
May 20, 1866 15
Mar. 3, 1869 15
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21
Mar. 3, 1856 11
June 2, 1864 13
Jan. 31, 1873 17
June 16, 1874 18
Mar. 3, 1875 18
June 15, 1878 20
Mar. 3, 1879 21
June 3, 1856 11
May 5, 1864 13
July 15, 1868 15
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21

17

CHICAGO, ROCK ISLAND AND
PACIFIC—Formerly Mis-
sissippi and Missouri—
(Iowa.)

Davenport, Iowa.

Transfer grounds
Union Pacific Rail-
road.

317 1/2

10

3

June 3, 1856 11
June 3, 1856 11
Apr. 25, 1862 12
July 5, 1862 12
Mar. 3, 1863 13
May 20, 1866 15
Mar. 3, 1869 15
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21
Mar. 3, 1856 11
June 2, 1864 13
Jan. 31, 1873 17
June 16, 1874 18
Mar. 3, 1875 18
June 15, 1878 20
Mar. 3, 1879 21
June 3, 1856 11
May 5, 1864 13
July 15, 1868 15
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21

18

CHICAGO, SAINT PAUL, MINN.
SEABOARD AND MINNEAPOLIS
DIVISION—Formerly the W. & W.
and the Trench and Lake
Superior R.R.—Wis. the
Saint Paul Stillwater and
Taylor & Falls, the Saint
Paul and Pacific and Min-
nesota Pacific Railroads—
(Minn.)

11 miles south of
Warrens, Wis.
Stillwater, via Still
water Junction,
Minn.

Hudson, Wis.
Saint Paul, Minn.

156
21

11

3

June 3, 1856 11
June 3, 1856 11
Apr. 25, 1862 12
July 5, 1862 12
Mar. 3, 1863 13
May 20, 1866 15
Mar. 3, 1869 15
June 16, 1874 18
Mar. 3, 1875 18
June 15, 1878 20
Mar. 3, 1879 21
June 3, 1856 11
May 5, 1864 13
July 15, 1868 15
June 16, 1874 18
Mar. 3, 1875 18
Mar. 3, 1879 21

And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—
Act of March 3, 1857, section 3, and March 3, 1865, section 5.

And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—
Act of May 15, 1856, section 3.

And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—
Act of June 3, 1856, section 3.

It is understood that this road is about to be consolidated with the Burlington and Missouri River Railroad in Nebraska.

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made.	Termini of land-grant and bonded portions of the roads.		Miles.	Corresponding No. in succeeding tables.		Extracts from the laws relating to land-grant and bonded railroads.		
		From—	To—		No.	Title	Dates of laws.	Statute	Conditions of grant, so far as relates to the use of the road by the United States.
8	CENTRAL PACIFIC—(Cont'd) CENTRAL PACIFIC—Goshen Division. (Formerly Southern Pacific.)	Goshen, Cal	Huron, Cal	40	3, 10, 11 4, 10	4 4	Same as No. 7		
9	CHICAGO, BURLINGTON AND QUINCY—Main Line. (Formerly Burlington and Missouri River—Iowa.)	Burlington, Iowa	Missouri River, Iowa, at East Plattsmouth, via Pacific Junction.	279 3/8	4	3	May 15, 1856 June 2, 1864 Mar. 3, 1865 Feb. 10, 1866 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	11 13 13 14 18 18 21	similar grants of land, subject to all the conditions and limitations herein provided, and shall be required to construct its road on the like regulations, as to time and manner, with the Atlantic and Pacific Railroad herein provided for." " And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."— <i>Act of May 15, 1856.</i>
10	CHICAGO, MILWAUKEE AND SAINT PAUL—Iowa and Minnesota Division—(Formerly Minneapolis and Cedar Valley, and Minnesota Central, Austin and State Line—Minnesota.)	Saint Paul, via Mendota, Fari bault, and Austin—Minneapolis, via Mendota, Fari bault and Austin.	Lyle, Minn.	112 115	5	3	Mar. 3, 1857 Mar. 3, 1865 July 13, 1866 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	11 13 14 18 18 21	" And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."— <i>Acts of March 3, 1857, section 3, and March 3, 1865, section 5.</i>
11	CHICAGO, MILWAUKEE AND SAINT PAUL—Iowa and Dakota Division. (Formerly McGregor and Sioux City and McGregor and Missouri River—Iowa.)	Calmar, Iowa	Sheldon, junction with Saint Paul and Sioux City Railroad.	211	6	3	May 12, 1864 June 6, 1874 Mar. 3, 1875 Mar. 3, 1879	13 18 18 21	" And the said railroad shall be and remain a public highway for the use of the Government of the United States, free of all toll or other charges upon the transportation of any property or troops of the United States."— <i>Act of May 12, 1864, section 2.</i>
12	CHICAGO, MILWAUKEE AND SAINT PAUL—Hastings and Dakota Division. (Formerly Hastings and Dakota—Minn.)	Hastings, Minn.	Ortonville, at western boundary of the State.	202	2	2	July 4, 1866 July 13, 1866	14 14	" And the said railroad shall be and remain a public highway for the use of the Government of the United States, free of all toll or other charges upon the transportation of any property or troops of the United States, and the same shall at all times be transported at the cost, charge, and expense in

Line	Route	Station	Transfer	Rate	Days	Notes
14	CHICAGO AND NORTHWESTERN— Iowa Division. (Formerly Cedar Rapids and Missouri River—Iowa)	Cedar Rapids, Iowa.	Transfer grounds— Union Pacific Railroad	371 ¹ / ₂	7	May 15, 1856 June 2, 1864 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879
		Branch, Lyons, Iowa	Clinton, Iowa	2 ¹ / ₂	3	
15	CHICAGO AND NORTHWESTERN— Iowa Division (Formerly the Winona and Saint Peter—Minnesota)	Winona, Minn.	A point on the Big Sioux River 10 ¹ / ₂ miles east of Lake Kampeska Station.	323 ¹ / ₂	8	Mar. 2, 1857 Mar. 3, 1865 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879
16	CHICAGO AND NORTHWESTERN— Iowa Division (Formerly the Winona and Saint Peter—Minnesota)	Fond du Lac, Wis.	Marquette, Mich.	253 ¹ / ₂	9	June 3, 1856 June 3, 1864 Apr. 25, 1863 July 5, 1862 Mar. 3, 1865 May 20, 1868 Mar. 3, 1869 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879
17	CHICAGO, ROCK ISLAND AND PACIFIC (Formerly Mississippi and Missouri—Iowa.)	Davenport, Iowa	Transfer grounds— Union Pacific Railroad.	317 ¹ / ₂	10	May 15, 1856 June 2, 1864 Jan. 31, 1873 June 16, 1874 Mar. 3, 1875 June 15, 1878 Mar. 3, 1879
18	CHICAGO, SAINT PAUL, MINNEAPOLIS AND OMAHA— Iowa Division (Formerly the Winona and the Tonah and Lake Superior R. R. Wis., the Saint Paul, Stillwater and Taylor & Falls, the Saint Paul and Pacific, and Minnesota Pacific Railroads—Minn.)	11 miles south of Warren, Wis. Stillwater, via Stillwater Junction, Minn.	Hudson, Wis. Saint Paul, Minn.	156 21	11	June 3, 1856 May 5, 1864 July 15, 1868 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879

It is understood that this road is about to be consolidated with the Burlington and Missouri River Railroad in Nebraska.

States, and the same about all times for

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Act of March 3, 1857, section 3, and March 3, 1868, section 5.*

“And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States.”—*Act June 3, 1856, section 3.*

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Act of May 15, 1856, section 2.*

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Act June 2, 1856, section 3.*

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number.	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made.	Termini of land grant and bonded portions of the roads.		Corresponding No. in succeeding tables.	Extracts from the laws relating to land-grant and bonded railroads.	
		From—	To—		Dates of laws.	Conditions of grant, so far as relates to the use of the road by the United States.
19	CHICAGO, SAINT PAUL, MINNEAPOLIS AND OMAHA—Western Division (Formerly the Saint Paul and Sioux City and Saint Paul and Minnesota Valley Railways—Minnesota.)	Saint Paul, Minn., via Le Mars.	Sioux City, Iowa.	12	3 Mar. 3, 1857 May 12, 1864 July 8, 1866 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	“And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States.”— <i>Act of March 3, 1857, section 3.</i>
20	CHICAGO SAINT PAUL, MINNEAPOLIS AND OMAHA—Northern Division (Formerly North Wisconsin and Saint Paul and Lake Superior Railway—Wisconsin.)	Hudson, Wis.	The west end of Lake Superior, with a branch from some point on said railroad to Bayfield.	13, 30	3 June 3, 1856 May 5, 1864 June 13, 1874 Mar. 3, 1875 Mar. 3, 1879	“And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States.”— <i>Act of June 3, 1856, section 2.</i>
21	CHICAGO, SAINT PAUL, MINNEAPOLIS AND OMAHA—Omaha Division—Sioux City and Pacific Railway grant assigned from Kansas Pacific.)	Blair	Premont	9	4 (Same as No. 46.)	(Same as No. 46.)
22	DENVER PACIFIC (Land grant assigned from Kansas Pacific.)	Denver, Colo.	Cheyenne, Wyo.	5, 17	4 July 1, 1862 July 2, 1864 May 7, 1866 July 3, 1868 Mar. 3, 1869 June 20, 1874	Same as No. 5, except that as the company received no bonds from the United States it is entitled to receive the full amount earned from transportation for the United States.— <i>See decision of Second Comptroller of the Treasury, April 21, 1871 No. 102 Q. M. & O., 1871, also decision of Supreme Court October term 1878 No. 78) and except that the act of May 7, 1878 does not apply to this road, but see opinion of Attorney General, on page 9 of this order.</i>
23	FLINT AND PEEKMAQUETTE—Michigan.	Flint, Mich.	Ludington, on Lake Michigan, Mich.	14	3 June 3, 1856 Feb. 17, 1865 July 3, 1866 Mar. 3, 1871 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	“And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States.”— <i>Act of June 3, 1856, section 3.</i>

24	GRAND RAPIDS AND IN. / Fort Wayne, Ind.....	Potomac, on Traverser / Hay, Mich.	13	3	June 3, 1864	11	9	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of June 3, 1856, section 2.
25	HANNIBAL AND SAINT JOSEPH / —Missouri.	Hannibal, Mo	16	3	June 10, 1852	12	8	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of June 10, 1852, section 4.
26	ILLINOIS CENTRAL.—Chicago Division.—Illinois.	Chicago, Ill.....	17	3	Sept. 20, 1850	9	466	"And the said railroad and branches shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of September 20, 1850, section 4.
27	ILLINOIS CENTRAL.—North- / ern Division.—Illinois.	Cairo, Ill.....	18	3	Sept. 20, 1850	9	466	"And the said railroad and branches shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of September 20, 1850, section 4.
28	ILLINOIS CENTRAL.—Iowa / Division (Formerly Du / buque and Sioux City, / and Iowa Falls and Sioux / City—Iowa)	Dubuque, Iowa	19	3	May 15, 1856	11	9	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of May 15, 1856, section 2.
29	JACKSONVILLE, PENNSYLVANIA / AND MOBILE (Formerly / the Florida, Atlantic and / Gulf Central and Pennsylvanian / and Georgia—Florida.)	Jacksonville, Fla	20	3	May 17, 1856	11	15	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Section 2, Act of May 17, 1856.
30	KANSAS PACIFIC. (Form / erly Leavenworth, Paw / nee and Western.)	Kansas City, Mo	6, 10	4	July 1, 1862	12	489	Same as No. 5, except that the act of May 7, 1878, does not apply to this road. (But see opinion of Attorney-General, on page 9 of this order.)
		Grant, Bonded			July 2, 1864	13	356	
					Mar. 3, 1865	13	504	
					May 7, 1866	14	355	

The Denver Pacific Railroad has been consolidated with the Union Pacific Railroad under the name of Union Pacific Railroad, which see.

Branch road from Wilton to Traverser City is not a land grant road.

Branches at Centralia. From Cairo to Centralia only one track.

The Kansas Pacific Railway is consolidated with the Union Pacific Railroad under the name of the Union Pacific Railway, and is known as the Kansas Division of the Union Pacific Railway, which see. The Kansas Pacific Railway is a bonded road for 300,000 miles from Kansas City, and the lien of the United States on account of bonds issued to the company extends only to that portion of the road.—Decision of the Supreme Court, October term, 1878. But see opinion of Attorney-General on page 9 of this order. The earnings of the road from government transportation are retained on account of bonds issued to the company and not on account of land-grant.

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made.	Termini of land grant and bonded portions of the roads.	Corresponding No. in succeeding tables	Miles.		From—	To—	Dates of laws.	Extracts from the laws relating to land-grant and bonded railroads.	Conditions of grant, so far as relates to the use of the road by the United States.		
				21	22							
KANSAS PACIFIC—Continued												
31	KANSAS CITY LAWRENCE AND SOUTHERN (Formerly Lawrence, Lawrence and Galveston, and Lawrence, Lawrence and Fort Gibson—Kansas.)	Lawrence, Kans.	21	143.24		South Line of Kansas		July 3, 1866 Mar. 6, 1868 Mar. 3, 1869 Mar. 3, 1869 Mar. 3, 1873 June 20, 1874 Mar. 3, 1868 July 1, 1864 Apr. 9, 1871 June 16, 1874 July 24, 1876 Mar. 3, 1875 Mar. 3, 1879	14 15 15 16 17 18 12 13 17 18 19 18 21 155	79 80 324 348 508 111 772 339 5 74 101 453 280	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from all toll or other charge upon the transportation of any property or troops of the United States."— <i>Act of March 3, 1863, section 3.</i> "And the said railroad and branches shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."— <i>Act of February 9, 1863, section 4.</i> "And provided further, That all property and troops of the United States shall at all times be transported over said railroad and branches at the cost, charge, and expense of the company or corporation owning or operating said road and branches respectively, when so required by the Government of the United States."— <i>Act of July 25, 1863, section 1.</i>	
32	LITTLE ROCK AND FORT SMITH—Arkansas	Little Rock, Ark.	4	165.75		Fort Smith, Ark.		Feb. 9, 1853 July 28, 1866 Apr. 10, 1869 Mar. 8, 1870	10 14 16 18	155 938 46 76		
33	LOUISVILLE AND NASHVILLE—Louisville, Nashville and Montgomery Lane (Formerly the Tennessee and Alabama Central South and North Alabama and Florida and Montgomery Railroad—Alabama.)	Decatur, Ala., via Montgomery, Ala.	22	297		Pollard, Ala.		May 17, 1856 June 3, 1858 Mar. 3, 1857 Apr. 10, 1867 Mar. 3, 1871 June 16, 1874 Mar. 3, 1875	11 11 11 16 16 14 21	15 17 206 45 540 74 459		"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."— <i>Act of June 3, 1858, section 3, and May 17, 1856, section 2.</i>

of any property or troops of the United States. —Act of June 2, 1866, section 2.

"And the said railroad and branches shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. —Act of February 9, 1863, section 4.

"And provided further, That all property and troops of the United States shall at all times be transported over said railroad and branches at the cost charge, and expense of the company or corporation owning or operating said road and branches respectively when so required by the Government of the United States. —Act of July 26, 1866, section 1.

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. —Act of June 3, 1866, section 3.

"And provided further, That the road mentioned in the first section of this act—Ansbay, Lansing and Traverses Bay—shall be and remain a public highway for the use of the Government of the United States, and shall transport free from toll or other charges, all property, troops, and munitions of war belonging to the same. —Act of July 3, 1866, section 3.

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from all toll or other charge upon the transportation of any property or troops of the United States. —Act of March 3, 1863, section 3.

"Provided, That said railroad shall be a public highway and shall transport troops and munitions of war of the United States free of charge. —Act of July 1, 1864, section 1.

35	Memphis and Little Rock—Arkansas.	Mississippi River, opposite Memphis, Tenn.	Little Rock, Ark.	131	5	2	Apr. 30, 1871 June 18, 1874 Mar. 8, 1875 Mar. 3, 1879 Feb. 9, 1883 July 28, 1886	17 18 18 21 10 14	943 74 458 380 155 338
36	Michigan Central—Saginaw and Mackinaw Rivers (Formerly the Ansbay, Lansing and Traverses Bay, and Jackson, Lansing and Saginaw Railroads—Michigan)	Ansbay, Mich., via Jackson, Lansing, West Bay City and Gaylord	Straits of Mackinaw	...	6	2	June 3, 1856 July 3, 1866 Mar. 2, 1867 Mar. 3, 1871	11 14 14 18	91 78 425 590
37	Missouri, Kansas and Texas (Formerly the Union Pacific, Southern Branch—Kansas)	Junction City, Kans.	Southern boundary of Kansas, and to Fort Smith when the Indian title is extinguished.	162 (56)	7	2	Mar. 3, 1863 July 1, 1864 July 26, 1866	12 13 14	772 339 280

* That portion of the Michigan Central Railway, formerly the Jackson, Lansing and Saginaw Railway, between Jackson and Lansing, is not a land-grant road, and between Ansbay and Jackson the road is not built.

TABLE No. I.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number.	Present names of companies owning or operating the roads with names of companies or States to which the grants were originally made.	Termini of land grant and bonded portions of the roads.	Corresponding No. in succeeding tables.	Statute.	Excerpts from the laws relating to land-grant and bonded railroads.	
		From To— Miles.		Dates of laws.	Conditions of grant, so far as relates to the use of the road by the United States.	
38	MISSOURI PACIFIC. (Formerly the Southwest Branch, P. R. R., of Missouri—Missouri.)	Saint Louis, Mo. Pacific, Mo. 37	24	3	June 10, 1852 10 8 Mar. 6, 1862 12 614 June 5, 1862 12 422 June 16, 1874 18 74 Mar. 3, 1876 18 453 Mar. 3, 1878 21 390 July 1, 1882 13 489 July 2, 1884 13 386 Mar. 3, 1885 13 504 Mar. 3, 1878 17 508 June 20, 1874 18 111 June 3, 1886 17 17 June 16, 1874 18 74 Mar. 3, 1875 18 453 Mar. 3, 1879 21 390	And be it further enacted, That the grant of lands hereby made is upon condition that said company, after the construction of its road, shall keep it in repair and use, and shall at all times transport troops, munitions of war, supplies, and public stores upon its road for the Government of the United States, free from all cost or charge therefor to the government, when required to do so by any department thereof. — Act of July 26, 1868, section 3. And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 10, 1852, section 4. Same as No. 5, excepting that the act of May 7, 1878, does not apply to this road. But see opinion of Attorney-General, on page 9 of this order.
39	MISSOURI PACIFIC—Central Branch Division. (Formerly Central Branch Union Pacific and Atchison and Pike's Peak.)	Atchison, Kans. Waterville, Kans. 100	7	4	June 10, 1852 10 8 Mar. 6, 1862 12 614 June 5, 1862 12 422 June 16, 1874 18 74 Mar. 3, 1876 18 453 Mar. 3, 1878 21 390 July 1, 1882 13 489 July 2, 1884 13 386 Mar. 3, 1885 13 504 Mar. 3, 1878 17 508 June 20, 1874 18 111 June 3, 1886 17 17 June 16, 1874 18 74 Mar. 3, 1875 18 453 Mar. 3, 1879 21 390	And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3. And the said railroad and branches shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3.
40	MOBILE AND GILBERT—Alabama.	Columbus, Ga. Troy, Ala. 64	25	3	Sept. 20, 1850 9 486 June 16, 1874 18 74 Mar. 3, 1875 18 453 Mar. 3, 1879 21 390	And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3. And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3.
41	MOBILE AND GILBERT—Alabama and Mississippi.	Mobile, Ala. Columbus, Ky. 473	26	3	Sept. 20, 1850 9 486 June 16, 1874 18 74 Mar. 3, 1875 18 453 Mar. 3, 1879 21 390	And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3. And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3.
42	MOBILE AND GILBERT—Alabama and Mississippi.	New Orleans, La. Mobile City, La. 140	27	3	Sept. 20, 1850 9 486 June 16, 1874 18 74 Mar. 3, 1875 18 453 Mar. 3, 1879 21 390	And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3. And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — Act of June 3, 1856, section 3.

No.	Description.	Origin.	Destination.	Date.	Amount.	Remarks.
44	NORTHERN PACIFIC—Saint Paul Division (Formerly the Western Railroad of Minnesota, and Saint Vincent extension of the Saint Paul and Pacific, now part of the Saint Paul, Minneapolis and Manitoba Railroad—Minnesota.)	Saint Paul via Saint Rapids, Minn.	Brainerd, Minn.	136	29	3
				Mar. 3, 1857	11	185
				July 12, 1862	12	624
				Mar. 3, 1865	13	526
				July 3, 1866	14	97
				Mar. 3, 1871	16	588
				Mar. 3, 1873	17	631
				June 16, 1874	18	74
				June 22, 1874	18	203
				Mar. 3, 1875	18	453
				Mar. 3, 1879	21	340
				June 3, 1876	11	20
				May 5, 1884	13	66
				June 16, 1874	18	74
				Mar. 3, 1875	18	433
				Mar. 3, 1879	21	380
				July 25, 1866	14	239
				July 25, 1868	16	90
45	NORTH WISCONSIN (Formerly the Saint Croix and Lake Superior—Wisconsin.)	Rollison, Wis.	The west end of Lake Superior, with a branch from some point on said railroad to Bayfield.	.....	30	3
46	OREGON AND CALIFORNIA	Portland, Oreg.	Southern boundary of the State.	.....	8	2

postal, military, naval, and all other government service, and also subject to such regulations as Congress may impose restricting the charges for such government transportation."—*Act of July 2, 1864, section 11.*

"And be it further enacted, That the directors of said company shall, from time to time, fix, determine, and regulate the fares, tolls, and charges to be received and paid for transportation of persons and property on said road, or any part thereof."—*Ibid., section 12.*

"Provided, That said company shall not charge the government higher rates than they do individuals for like transportation and telegraph service."—*Ibid., section 5.*

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Acts of March 3, 1857, section 3, and March 3, 1865, section 5.*

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Act June 3, 1856, section 3.*

"And be it further enacted, That the grants aforesaid are made upon the condition that,

The Missouri Pacific and the Saint Louis and San Francisco Railroad Companies use same track between Saint Louis and Pacific station.

The Central Branch Union Pacific Railroad, is a bonded as well as a land-grant road for 100 miles.

The Northern Pacific and Duluth Railroad Companies use same track between Duluth and Northern Pacific Junction, 24 miles. It is land-grant, and subject to the conditions imposed on the Saint Paul and Duluth Railroad, which see.

The Northern Pacific Railroad Company has joint use with the Saint Paul, Minneapolis and Manitoba Railroad Company, 75½ miles, of the track from Saint Paul to Saint Rapids, and operates, under lease, the road, formerly the Western Railroad of Minnesota, from Saint Rapids to Brainerd. The whole road from Saint Paul to Brainerd is land-grant, and subject to the conditions imposed on the Saint Paul, Minneapolis and Manitoba Railroad, which see.

The North Wisconsin Railroad is operated by the Chicago, Saint Paul, Minneapolis and Omaha Railway Company. It is understood that the road is about to be connected with the Saint Paul and Sioux City and the Chicago, Saint Paul and Minneapolis railroads, under the name of Chicago, Saint Paul, Minneapolis and Omaha Railroad.

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number.	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made.	Termini of land-grant and bonded portions of the roads.			Corresponding No. in succeeding tables.	Extracts from the laws relating to land-grant and bonded railroads.		
		From—	To—	Miles.		Dates of laws.	Statute.	Page.
OREGON AND CALIFORNIA— Continued.								
47	PENSACOLA. (Formerly the Alabama and Florida and Pensacola and Louisville —Florida.) Operated by the Louisville and Nashville Railroad Company.	Pensacola, Fla.....	Junction with old Mobile and Montgomery, now Louisville and Nashville Railroad.	45	31	3	May 17, 1856 11 June 8, 1872 17 June 16, 1874 18 Mar. 3, 1875 18 Mar. 3, 1879 21	
48	SELMA, ROME AND DALTON. (Formerly the Alabama and Tennessee—Alabama.)	Selma, Ala.....	11 miles north of Jacksonville, Ala.	156	32	3	June 3, 1856 11 May 23, 1872 17 June 16, 1874 18 Mar. 3, 1875 18 Mar. 3, 1879 21	
49	STLOUX CITY AND PACIFIC.	Stloux City, Iowa, via California Junction.	Fremont, Nebr.....	101 1/2	9	4	July 1, 1862 12 July 2, 1864 13 Mar. 3, 1866 13	

51	SOUTHERN PACIFIC OF CALIFORNIA--Northern Division--Main line.†	San José, Cal., via Tres Pinos, Huron, Goshen, Mojave.	Colorado River, to connect with the Saint Louis and San Francisco Railroad. (Formerly the Atlantic and Pacific Railroad.)	3, 4, 10	4	July 27, 1866 July 25, 1868 June 20, 1870 Mar. 3, 1871	14 15 16 16	292 187 453 579	<p>and the same shall at all times be transported at the cost, charge, and expense in all respects of the company or corporation, or their successors or assigns, having or receiving the benefits of the land-grants herein made."--<i>Act of July 4, 1866, section 3.</i></p> <p>"And be it further enacted, That said Atlantic and Pacific Railroad, or any part thereof, shall be a post route and military road, subject to the use of the United States for postal, military, naval, and all other Government service, and also subject to such regulations as Congress may impose restricting the charges for such Government transportation."--<i>Act July 27, 1866, section 11.</i></p> <p>"And be it further enacted, That the directors of said company shall * * * from time to time, fix, determine, and regulate the fares, tolls, and charges to be received and paid for transportation of persons and property on said road, or any part thereof."--<i>Section 13.</i></p> <p>"Provided, That said company shall not charge the Government higher rates than they do individuals for like transportation and telegraphic service."--<i>Section 5.</i></p> <p>"SEC. 18. And be it further enacted, That the Southern Pacific Railroad, a company incorporated under the laws of the State of California, is hereby authorized to connect with the said Atlantic and Pacific Railroad, formed under this act, at such point, near the boundary line of the State of California, as they shall deem most suitable for a railroad line to San Francisco, and shall have a uniform gauge and rate of freight or fare with said road; and in consideration thereof, to aid in its construction, shall have similar grants of land, subject to all the conditions and limitations herein provided,</p>
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* That portion of the Sioux City and Pacific Railroad between California Junction and Missouri Valley Junction is not a land-grant or bonded road. The remainder of the road is both land-grant and bonded.

† That portion of the line covered by the grant to the Southern Pacific Railroad Company between Huron (via Goshen) and Mojave is operated by the Central Pacific Railroad Company, which see.

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number.	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made.	Termini of land grant and bonded portions of the roads.		Corresponding No. in succeeding tables.	Extracts from the laws relating to land-grant and bonded railroads.	
		From—	To—		Dates of laws.	Conditions of grant, so far as relates to the use of the road by the United States.
				Table.	Statute.	Page.
	NORTHERN PACIFIC OF CALIFORNIA—Continued.					
52	SOUTHERN PACIFIC OF CALIFORNIA—Branch line.	Mojave via Los Angeles.	Colorado River at or near Yuma, to connect with the Texas and Pacific Railroad.	3, 11	Mar. 3, 1871	16 570 Same as No. 51.
53	SAINT LOUIS AND WESTERN (Formerly Saint Joseph and Denver City—Kansas.)	Elwood, Kans.	Hastings, Kans.	12, 18	July 23, 1868	11 216 "And be it further enacted, That the grant of the lands hereby made is upon the condition that said company, after the construction of its road, shall keep it in repair and use, and shall at all times be in readiness to transport troops, munitions of war, supplies, and public stores upon its road for the government when required to do so by any department thereof, the government at all times having the preference in the use of the road, for all the purposes aforesaid, at fair and reasonable rates of compensation, not exceeding that paid by private individuals, or the average paid for like services on other roads."—Section 2.
54	SAINT LOUIS, IRON MOUNTAIN AND SOUTHERN—Missouri, Arkansas and Texas Divisions. (Formerly Cairo and Fulton—Missouri and Arkansas.)	Bird's Point, on the Mississippi River opposite Cairo, Ill., via Poplar Bluff, Mo., and Little Rock, Ark.	Texarkana	10	Feb. 9, 1853 July 28, 1856 Mar. 3, 1869 May 6, 1870	155 156 158 349 376 "And the said railroad and branches shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. —Act of February 9, 1853, section 4. "And provided further, That all property and troops of the United States shall at all times be transported over said railroad and

56	SOUTHWEST BRANCH PACIFIC RAILROAD OF MISSOURI, AND ATLANTIC AND PACIFIC RAILROAD—MISSOURI.) SAINT LOUIS AND SAN FRANCISCO. (Formerly Atlantic and Pacific.)	Springfield, Mo., via Canadian River, Albuquerque, the Agua Fria and Colorado Rivers.	Pacific Ocean, with a branch from the Canadian River to the western boundary of Arkansas at or near Van Buren, Ark.	13	4	June 5, 1862 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879 July 27, 1866 Apr. 20, 1871	12 18 18 21 14 17	422 74 453 390 202 19	public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Act of June 10, 1862, section 3. "And be it further enacted, That said Atlantic and Pacific Railroad, or any part thereof, shall be a post route and military road, subject to the use of the United States for postal, military, naval, and all other government service, and also subject to such regulations as Congress may impose restricting the charges for such government transportation."—Act July 27, 1866, section 11. "And be it further enacted, That the directors of said company shall * * * from time to time, fix, determine, and regulate the fares, tolls, and charges to be received and paid for transportation of persons and property on said road, or any part thereof."—Section 13. "Provided, That said company shall not charge the government higher rates than they do individuals for like transportation and telegraphic service."—Section 5.
57	SAINT PAUL AND DULUTH. (Formerly Lake Superior and Mississippi, Saint Paul and Stillwater, Saint Paul and Pacific, and Minnesota Pacific—Minnesota.)	Saint Paul, Minn. Branch from White Bear Lake.	Duluth, Minn. Stillwater, Minn.	34	3	Mar. 3, 1857 May 15, 1864 Mar. 3, 1865 July 13, 1866 July 13, 1866 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879	11 13 13 14 14 18 18 21	195 64 526 98 97 74 453 390	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Acts of March 3, 1857, section 3, May 15, 1864, section 5, and of March 3, 1865, section 5.
58	SAINT PAUL, MINNEAPOLIS AND MANITOBA—Breckinridge Division. (Formerly Saint Paul and Pacific—Minnesota.)	Saint Paul, Minn. Breckinridge, Minn.		35	3	Mar. 3, 1857 Mar. 3, 1865 July 3, 1868 June 10, 1874 Mar. 3, 1875 Mar. 3, 1879	11 13 14 18 18 21	195 526 97 74 453 390	"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—Acts of March 3, 1857, section 3, and March 3, 1865, section 5.

* This portion of the Southern Pacific Railroad is operated by the Central Pacific Railroad Company, which see.

† This road is now operated as the Saint Joseph and Western Division of the Union Pacific Railroad, which see. The town of Elwood is presumed to be West Saint Joseph given in the Railway Guide.

; That portion of the Saint Paul, Minneapolis and Manitoba Railroad between Breckinridge and Barnesville is not a land-grant road.

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Termini of land-grant and bonded portions of the road.		Correspond- ing No. in succeeding tables.		Extracts from the laws relating to land-grant and bonded railroads.			
Present names of companies owning or operating the roads, with names of com- panies or States to which the grants were originally made.	From—	To—	Miles.	Table	Dates of laws.	Section No. & Page	Conditions of grant, so far as relates to the use of the road by the United States.
50 * SAINT PAUL, MINNEAPOLIS AND MANITOBA—Saint Vincent Division—Minne- sota. (Formerly Saint Paul and Pacific.)	Saint Paul via Saint Cloud and Barnes- ville, Minn.	Saint Vincent, Minn . . .	388 ¹ / ₂	36	3 Mar. 3, 1857 July 12, 1862 Mar. 3, 1865 July 3, 1866 Mar. 3, 1871 Mar. 3, 1873 June 16, 1874 June 22, 1874 Mar. 3, 1875 Mar. 3, 1879 Mar. 3, 1857 May 12, 1864 July 3, 1866 June 16, 1874 Mar. 3, 1875 Mar. 3, 1879 Mar. 3, 1871	11 195 12 624 13 526 14 97 16 588 17 631 18 74 18 203 18 453 21 390 11 195 13 72 14 97 18 74 18 453 21 390 16 573	" And the said railroad shall be and remain a public highway for the use of the Govern- ment of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."— <i>Acts of March 3, 1857, section 3, and March</i> <i>3, 1865, section 5.</i>
60 † SAINT PAUL AND SIOUX CITY. (Formerly Saint Paul and Sioux City, and Sioux City and Saint Paul, and Minnesota Valley— Minnesota.)	Saint Paul, Minn., via Le Mars.	Sioux City, Iowa	270	37	3	185	" And the said railroad shall be and remain a public highway for the use of the Govern- ment of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."— <i>Act of March 3, 1857, section 3.</i>
61 TEXAS AND PACIFIC—Jeffer- son and Southern Divi- sion. (Formerly Texas Pacific.)	A point near Marshall, Tex., via El Paso to southern boundary of California, thence.	San Diego, Cal		14	4	573	" That the Texas and Pacific Railroad Com- pany shall be, and it is hereby, declared to be a military and post road; and for the purpose of insuring the carrying the mails, troops, munitions of war, supplies and stores of the United States, no act of the company nor any law of any State or Ter- ritory shall impede, delay, or prevent the said company from performing its obliga- tions to the United States in that regard: <i>Provided</i> , That said road shall be subject to the use of the United States for postal, military, and all other governmental serv- ices, at fair and reasonable rates of com- pensation, not to exceed the price paid by private parties for the same kind of serv- ice, and the government shall at all times have the preference in the use of the same for the purpose aforesaid."— <i>Section 19.</i>

ern Division—
part of the Vicksburg,
Shreveport and Texas—
Louisiana.)

63 Union Pacific—Union
Division. (Formerly Pa-
cific Railroad.)

Council Bluffs, Iowa . . . Ogden, Utah 1,033 1/2

15

4

July 1, 1862 12 489
July 2, 1864 13 356
Mar. 3, 1865 13 504
July 3, 1866 14 79
July 25, 1866 14 244
July 26, 1866 14 367
Apr. 10, 1869 16 56
May 6, 1870 16 121
Feb. 24, 1871 16 430
Mar. 3, 1873 17 508
June 20, 1874 18 111
May 7, 1878 20 56

June 16, 1874 18 74
Mar. 3, 1875 18 453
Mar. 3, 1879 21 390

public highway for the use of the Govern-
ment of the United States, free from toll or
other charge upon the transportation of any
property or troops of the United States."—
Act of June 3, 1856, section 3.

"And be it further enacted, That the grants
aforesaid are made upon the condition that
said company * * * shall keep said
railroad and telegraph line in repair and
use, and shall at all times transmit dis-
patches over said telegraph line, and trans-
port mails, troops, munitions of war, sup-
plies, and public stores upon said railroad
for the government, whenever required to
do so by any department thereof, and that
the government shall at all times have the
preference in the use of the same for all the
purposes aforesaid (at fair and reasonable
rates of compensation, not to exceed the
amounts paid by private parties for the
same kind of service); and all compensation
for services rendered for the government
shall be applied to the payment of said
bonds and interest until the whole amount
is fully paid."—*Act of July 1, 1862, section*
6.

"And be it further enacted, That whenever it
appears that the net earnings of the entire
road and telegraph, including the amount
allowed for services rendered for the United
States, after deducting all expenditures, in-
cluding repairs, and the furnishing, run-
ning, and managing of said road, shall ex-
ceed ten per centum upon its cost, exclusive
of the five per centum to be paid to the
United States, Congress may reduce the
rates of fare thereon, if unreasonable in
amount, and may fix and establish the same
by law, * * * and may, at any time,

The Saint Paul, Minneapolis and Manitoba Railroad Company and the Northern Pacific Railroad Company have joint use of track between Saint Paul and Sank Rapids.
The Saint Paul and Sioux City Railroad Company use the track of the Iowa Division of the Illinois Central Railroad between Le Mars and Sioux City, 26.38 miles. It is
a land-grant road. It is understood that the Saint Paul and Sioux City Railroad has been consolidated with the North Wisconsin, and the Chicago, Saint Paul and Minneap-
olis Railroad, under the name of "Chicago, Saint Paul, Minneapolis and Omaha Railway." (See No. 20.)

The Union Pacific Railroad really extends five miles beyond Ogden, and is a land-grant and bonded road the whole distance; but the five miles west of Ogden are operated
by and as a part of the Central Pacific Railroad. The earnings of the Union Pacific Railroad from government transportation are withheld on account of the bonds issued by
the United States to the company, and not on account of land grant. The road has been consolidated with the Denver Pacific and Kansas Pacific Railroads under the title of
the Union Pacific Railway.

TABLE No. 1.—Containing a complete list of all land-grant and bonded railroads, &c.—Continued.

Number	Present names of companies owning or operating the roads, with names of companies or States to which the grants were originally made	Termini of land-grant and bonded portions of the road.		Corresponding No. in succeeding tables.	Extracts from the laws relating to land-grant and bonded railroads.		
		From—	To—		Miles.	Table	Dates of laws.
63	Union Pacific—Union Division—Continued						

having due regard for the rights of said companies named herein, said to, alter, amend, or repeal this act.—*Ibid*, section 18.

“And that only one half of the compensation for services rendered for the government by said companies shall be required to be applied to the payment of the bonds issued by the government in aid of the construction of said roads.” *Act of July 2, 1864, section 5.*

“And be it further enacted, That the several companies authorized to construct the aforesaid roads (Union, Central, Western, Kansas, and Denver Pacific, Central Branch, Union Pacific, and Sioux City and Pacific) are hereby required to operate and use said roads and telegraph for all purposes of communication, travel, and transportation, so far as the public and the government are concerned, as one continuous line and, in such operation and use, to afford and secure to each equal advantages and facilities as to rates, time, and transportation, without any discrimination of any kind in favor of the road or business of any or of either of said companies, or adverse to the road or business of any or either of the others.”—*Ibid*, section 15.

“That any bridge constructed under this act, and according to its limitations, shall be a lawful structure, and shall be recognised and known as a post route upon which, also, no higher charge shall be made for the transmission over the same of the mails, troops, and the munitions of war of the United States, than the rate per mile paid

to rest upon bonds of the United States issued to any such company, and which shall not have been reimbursed, together with the five per centum of net earnings due and unpaid, as provided by w. —

Section 5260, Revised Statutes.
"That the whole amount of compensation which may from time to time, be due to said several railroad companies, respectively, for services rendered for the government, shall be retained by the United States, one-half thereof to be presently applied to the liquidation of the interest paid and to be paid by the United States upon the bonds so issued by it as aforesaid, to each of said corporations severally, and the other half thereof to be turned into the sinking fund hereinafter provided for the uses therein mentioned."—*Act of May 7, 1878, section 2.*

1878, section 2.
(See No. 30.)

(See No. 30.)

(See No. 22.)

(See No. 52.)

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States." *Act of August 11, 1859, section 3.*

And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States. — *Act of June 3, 1856, section 3.*

64	UNION PACIFIC—Kansas Division (Formerly the Kansas Pacific Railroad)	Kansas City, Mo.	Denver, Colo.—Land-grant.	638,14	16	4	(See No. 30.)
65	UNION PACIFIC—Cheyenne Division (Formerly the Denver Pacific Railroad)	Denver, Colo.	Rondel Cheyenne, Wyo.	283,44 106,12	17	4	(See No. 22.)
66	UNION PACIFIC—Saint Joseph and Western Railroad Division (Formerly Saint Joseph and Denver City Railroad—Kansas.)	Elwood or West Saint Joseph, Kans.	Hastings, Kans.	226	18	4	(See No. 52.)
67	VICKSBURG AVE MERIDIAN (Formerly Southern Mississippi—Mississippi.)	Jackson, Miss.	Meridian, Miss.	96	39	3	Aug 11, 1856 11 June 16, 1874 18 Mar. 3, 1875 18 Mar. 3, 1879 21 300
68	VICKSBURG, SUKKEE POINT AND PACIFIC (Formerly Vicksburg, Shreveport and Texas—Louisiana.)	Delta, La.	Monroe, La.	72	40	3	June 2, 1858 11 June 16, 1874 18 Mar. 3, 1875 18 Mar. 3, 1879 21 300

No. 2.—Containing a list of all land-grant railroads to which, under the conditions of the original acts of Congress granting the lands, no payments can be made for the transportation of troops and property of the United States, their termini and length. (See graph 2 of this order.)

Companies owning or operating the following-named railroads are required by law (see conditions of the grants in Table No. 1) to transport the troops and property of the United States over said roads, between the termini named in this table, free of cost, charge, or expense to the United States. Payments can, therefore, be made for transportation over these railroads.]

No. 1.	Name of railroad.	Termini of land-grant portion of road.		Miles.
		From—	To—	
6	CENTRAL PACIFIC—Oregon Division.	Junction with Central Pacific Railroad.	Southern boundary of Oregon.	.....
12	CHICAGO, MILWAUKEE AND SAINT PAUL—Hastings and Dakota Division, Minnesota.	Hastings, Minn	Ortonville, at western boundary of the State.	202
13	CHICAGO, MILWAUKEE AND SAINT PAUL—Southern Minnesota Division, Minnesota.	The Mississippi River (Grand Crossing) opposite La Crosse, Wis.	Airlie, on western boundary of the State of Minnesota.	299 ¹ / ₂
32	LITTLE ROCK AND FORT SMITH—Arkansas.	Little Rock, Ark	Fort Smith, Ark	165 ¹ / ₂
35	MEMPHIS AND LITTLE ROCK—Arkansas.	Mississippi River opposite Memphis, Tenn.	Little Rock, Ark	133
36	*MICHIGAN CENTRAL—Saginaw and Mackinaw Divisions, Michigan.	Amboy, Mich., via Jackson, Lansing, West Bay City, and Gaylord.	Straits of Mackinaw .....	.....
37	MISSOURI, KANSAS AND TEXAS—Kansas.	Junction City, Kans	Southern boundary of Kansas, and to Fort Smith when the Indian title is extinguished.	182 ¹ / ₂
46	OREGON AND CALIFORNIA	Portland, Oreg	Southern boundary of the State.	.....
50	SOUTHERN MINNESOTA—Minnesota.	The Mississippi River (Grand Crossing) opposite La Crosse, Wis.	Airlie, on western boundary of the State.	299 ¹ / ₂
54	SAINT LOUIS, IRON MOUNTAIN AND SOUTHERN—Missouri and Arkansas.	Bird's Point, on the Mississippi River opposite Cairo, Ill., via Poplar Bluff, Mo., and Little Rock, Ark.	Texarkana	394 ¹ / ₂

constructed and operated as a land-grant road from Lansing to Bay City, Mich., thence north to Gaylord. That portion of the road from Jackson to Lansing is not a land-grant road, and between Amboy and Jackson the road is not built.

No. 3.—Containing a list of all land-grant railroads to which payments for the transportation of troops and property of the United States are forbidden by the acts of Congress of June 16 and 22, 1874, and March 3, 1875; their termini and length. (See paragraph 4 of this order.)

The following table contains a list of all land-grant railroads (embraced in Table No. 1) to which payment for the transportation of troops and property of the United States is forbidden by the acts of Congress of June 16 and 22, 1874, and March 3, 1875; their termini and length. No payments can, therefore, be made for transportation over these railroads.]

No. in Table No. 1.	Name of railroad.	Termini of land grant portion of road.		Miles.
		From—	To—	
1	ALABAMA AND GREAT SOUTHERN—Alabama.	Wauhatchie, Tenn	State line, Mississippi and Alabama.	270 ¹ / ₂
2	ATCHISON, TOPEKA AND SANTA FE—Kansas.	Atchison, Kans	State line, Kansas and Colorado.	470 ¹ / ₂

TABLE No. 3.—Containing a list of all land-grant railroads, &c.—Continued.

Running No.	Corresponding No. in Table No. 1.	Name of railroad.	Termini of land-grant portion of road.		Miles.
			From—	To—	
3	3	ATLANTIC, GULF AND WEST INDIA TRANSIT—Florida.	Fernandina, Fla	Cedar Keys, Fla	155
4	9	CHICAGO, BURLINGTON AND QUINCY—Main line—Iowa.	Burlington, Iowa	Missouri River, Iowa, at East Plattsmouth, via Pacific Junction.	279.7
5	10	CHICAGO, MILWAUKEE AND SAINT PAUL—Iowa and Minnesota Division—Minnesota.	Saint Paul, via Mendota, Faribault, and Austin—	Lyle, Minn	112
			Minneapolis, via Mendota, Faribault, and Austin.	Lyle, Minn	115
6	11	CHICAGO, MILWAUKEE AND SAINT PAUL—Iowa and Dakota Division—Iowa.	Calmar, Iowa	Sheldon, junction with Saint Paul and Sioux City Railroad.	21 1
7	14	CHICAGO AND NORTHWESTERN—Iowa Division—Iowa.	Cedar Rapids, Iowa	Transfer grounds Union Pacific Railroad.	27 1
8	15	CHICAGO AND NORTHWESTERN—Minnesota Division—Minnesota.	Branch, Lyons, Iowa	Clinton, Iowa	2
			Winona, Minn	A point on the Big Sioux River, 10.18 miles east of Lake Kampeska station.	323
9	16	CHICAGO AND NORTHWESTERN—Milwaukee, Green Bay and Marquette Line—Wisconsin and Michigan.	Fond du Lac, Wis	Marquette, Mich	253
10	17	CHICAGO, ROCK ISLAND AND PACIFIC—Iowa.	Davenport, Iowa	Transfer grounds Union Pacific Railroad.	31 7
11	18	CHICAGO, SAINT PAUL, MINNEAPOLIS AND OMAHA—Eastern Division—Wisconsin.	11 miles south of Warren's, Wis.	Hudson, Wis	156
			Stillwater, via Stillwater Junction, Minn.	Saint Paul, Minn	21
12	19	CHICAGO, SAINT PAUL, MINNEAPOLIS AND OMAHA—Western Division—Wisconsin.	Saint Paul, Minn., via Le Mars.	Sioux City, Iowa	270
13	20	CHICAGO, SAINT PAUL, MINNEAPOLIS AND OMAHA—Northern Division—Wisconsin.	Hudson, Wis	West end of Lake Superior, with a branch from some point on said railroad to Bayfield.	
14	23	FLINT AND PERE MARQUETTE—Michigan.	Flint, Mich	Ludington, on Lake Michigan, Michigan.	171
15	24	GRAND RAPIDS AND INDIANA—Iowa and Michigan.	Fort Wayne, Ind	Petoskey, on Traverse Bay, Michigan.	333
16	25	HANNIBAL AND SAINT JOSEPH—Missouri.	Hannibal, Mo	Saint Joseph, Mo	204.15
17	26	*ILLINOIS CENTRAL—Chicago Division—Illinois.	Cairo, Ill	Chicago, Ill	205
18	27	†ILLINOIS CENTRAL—Northern Division—Illinois.	Cairo, Ill	Dunleith, Ill	456
19	28	ILLINOIS CENTRAL—Iowa Division—Iowa.	Dubuque, Iowa	Sioux City, Iowa	324.15
20	29	JACKSONVILLE, PENSACOLA AND MOBILE—Florida.	Jacksonville, Fla	Chattahoochee River, Florida.	200
21	31	KANSAS CITY, LAWRENCE AND SOUTHERN—Kansas.	Lawrence, Kans	South line of Kansas	143.15
22	33	LOUISVILLE AND NASHVILLE—Louisville, Nashville and Montgomery Line—Alabama.	Decatur, Ala., via Montgomery.	Pollard, Ala	297
23	34	MARQUETTE, HOUGHTON AND ONTONAGON—Michigan.	Marquette, Mich	Ontonagon, Mich	
24	38	‡MISSOURI PACIFIC—Missouri.	Saint Louis, Mo	Pacific, Mo	37
25	40	MOBILE AND GIRARD—Alabama.	Columbus, Ala	Troy, Ala	24
26	41	MOBILE AND OHIO—Alabama, Mississippi, Tennessee, and Kentucky.	Mobile, Ala	Columbus, Ky	472
27	42	MORGAN'S LOUISIANA AND TEXAS—Louisiana.	New Orleans, La	Morgan City, La	80

* The Chicago and Northern Divisions of the Illinois Central Railroad branch at Centralia. From Cairo to Centralia there is but one track. See No. 18.

† The Northern and Chicago Divisions of the Illinois Central Railroad branch at Centralia. From Cairo to Centralia there is but one track. See No. 17.

‡ The Missouri Pacific and Saint Louis and San Francisco Railroad Companies use same track between Saint Louis and Pacific, Mo., 37 miles.

TABLE No. 3.—Containing a list of all land-grant railroads, &c.—Continued.

No. 1.	Name of railroad.	Termini of land-grant portion of road.		Miles.
		From—	To—	
43	* NORTHERN PACIFIC—Minnesota Division—Minnesota.	Duluth, Minn.....	Northern Pacific Junction, Minn.	24
44	† NORTHERN PACIFIC—Saint Paul Division—Minnesota.	Saint Paul, Minn., via Sauk Rapids.	Brainerd, Minn.....	136
45	NORTH WISCONSIN—Wisconsin.	Hudson, Wis.....	The west end of Lake Superior, with a branch from some point on said railroad to Bayfield.	.....
47	PENSACOLA—Florida. Operated by the Louisville and Nashville Railroad Company.	Pensacola, Fla.....	Junction with old Mobile and Montgomery, now Louisville and Nashville Railroad.	45
48	SELMA, ROME AND DALTON—Alabama.	Selma, Ala.....	11 miles north of Jacksonville, Ala.	156
55	‡ SAINT LOUIS AND SAN FRANCISCO—Missouri.	Saint Louis, Mo.....	Springfield, Mo.....	240½
57	§ SAINT PAUL AND DULUTH—Minnesota.	Saint Paul, Minn.....	Duluth, Minn.....	155
		Branch from White Bear Lake.	Stillwater, Minn.....	12
58	SAINT PAUL, MINNEAPOLIS AND MANITOBA—Breckinridge Division—Minnesota.	Saint Paul, Minn.....	Breckinridge, Minn.....	217
59	|| SAINT PAUL, MINNEAPOLIS AND MANITOBA—Saint Vincent Division—Minnesota.	Saint Paul, via Saint Cloud and Barnesville, Minn.	Saint Vincent, Minn....	388½
60	¶ SAINT PAUL AND SIOUX CITY—Minnesota and Iowa.	Saint Paul, Minn., via Le Mars.	Sioux City, Iowa.....	270
62	TEXAS AND PACIFIC—Southern Division—Louisiana.	Shreveport, La.....	Texas State line.....	21
67	VICKSBURG AND MERIDIAN—Mississippi.	Jackson, Miss.....	Meridian, Miss.....	96
68	VICKSBURG, SHREVEPORT AND PACIFIC—Louisiana.	Delta, La.....	Monroe, La.....	72
70	WISCONSIN CENTRAL—Wisconsin.	Portage City, via Stevens Point, Wis.	Bayfield, thence to Superior, on Lake Superior.	.....

Northern Pacific and Saint Paul and Duluth Railroad Companies use same track between Duluth and Northern Pacific Junction, 24 miles. See No. 34.

Northern Pacific Railroad Company has joint use with the Saint Paul, Minneapolis and Manitoba Railroad Company of the track between Saint Paul and Sauk Rapids, 75½ miles. See No. 36.

Missouri Pacific and Saint Louis and San Francisco Railroad Companies use same track between St. Louis and Pacific, Mo., 37 miles.

Saint Paul and Duluth and Northern Pacific Railroad Companies use same track between Duluth and Northern Pacific Junction, 24 miles. See No. 28.

Saint Paul, Minneapolis and Manitoba and the Northern Pacific Railroad Companies use same track between Saint Paul and Sauk Rapids, 75½ miles. See No. 29.

Saint Paul and Sioux City Railroad Company uses the track of the Iowa Division of the Illinois Railroad between Le Mars and Sioux City, 26¾ miles.

—The act of Congress prohibiting payments for transportation of troops and property of the States over the railroads named in this table (Table No. 3) is in the following words, to wit:

T making appropriations for the support of the Army for the fiscal year ending June thirtieth, eighteen hundred and seventy-six, and for other purposes.

enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the support of the Army for the year ending June thirtieth, eighteen hundred and seventy-six, as follows:

* * * * *

And provided further. That no money shall hereafter be paid to any railroad company for the transportation of property or troops of the United States over any railroad which, in whole or in part, was constructed by the aid of a grant of public land on the condition that such railroad should be a public highway for the use of the Government of the United States free from toll or other charge, or upon any other conditions for the use of such road, for such transportation; nor shall any allowance be made for the transportation of officers of the Army over any such road when on duty and under orders as military officers of the United States. But nothing herein contained shall be construed as preventing any railroad from bringing a suit in the Court of Claims for the charges for such transportation, and recovering for the same if found entitled thereto, by virtue of the laws in force prior to the passage of this act: *Provided*, That the claim for such charges shall not have been barred by the statute of limitations at the time of bringing the suit, and either party shall have the right of appeal to the Supreme Court of the United States: *And provided further.* That the foregoing provisions shall not apply for the next fiscal year, nor thereafter, to roads where the sole condition of transportation is that the railroad shall not charge the government higher rates than they do individuals for like transportation, and the Quartermaster-General shall be satisfied that this condition has been faithfully complied with.

TABLE No. 4.—Containing a list of all land-grant railroads to which compensation, in form or another, may be made for the transportation of troops and property of the United States, their termini and length. (See paragraph 5 of this order.)

[Full compensation may be made for transportation of troops and property of the United States over the following-named railroads, between the termini named, with the exception of that portion of the Northern Pacific Railroad between Duluth and Northern Pacific Junction, Minn; but see notes at the bottom of this table.]

Running No.	Corresponding No. in table No. 1.	Name of railroad.	Termini of land-grant and bonded portion of road.	
			From—	To—
1	4	BURLINGTON AND MISSOURI RIVER—Nebraska.	Plattsmouth, Nebr.....	Kearney Junction, Nebr. 1
2	5	*CENTRAL PACIFIC—Main line.	Ogden, Utah	San José, via Sacramento, Lathrop, Tracy, and Niles. 1
3	7, 52	**CENTRAL PACIFIC—Visalia Division, and Tulare, Los Angeles, and Yuma Divisions.	Goshen, via Tulare, Mojave, and Los Angeles.	Colorado River, at or near Yuma, to connect with the Texas and Pacific Railroad. 4
4	8, 51	**CENTRAL PACIFIC—Goshen Division.	Goshen, Cal.....	Huron, Cal
5	22, 65	**DENVER PACIFIC.....	Denver, Colo.....	Cheyenne, Wyo
6	30, 64	*KANSAS PACIFIC.....	Kansas City, Mo.....	Denver, Colo.....
7	39	*MISSOURI PACIFIC—Central Branch Division.	Atchison, Kans.....	Waterville, Kans..... 1
8	43	†NORTHERN PACIFIC—Minnesota, Dakota, Missouri, and Pacific Divisions, and Puyallup Branch.	Lake Superior (Duluth), Minn.	Puget Sound, Wash. T., with a branch via Columbia River, to a point near Portland, Oreg. ...
9	21, 49	*SIOUX CITY AND PACIFIC....	Sioux City, Iowa, via California Junction.	Fremont, Nebr..... 1
10	7, 8, 51	**SOUTHERN PACIFIC OF CALIFORNIA—Northern Division—main line—operated by Central Pacific Railroad Company from Goshen to Mojave.	San José, Cal., via Tres Pinos, Huron, Goshen, Mojave.	Colorado River, to connect with the Saint Louis and San Francisco Railroad. ...
11	7, 52	**SOUTHERN PACIFIC OF CALIFORNIA—Branch line—operated by Central Pacific Railroad Company.	Mojave, via Los Angeles, Cal.	Colorado River, at or near Yuma, to connect with the Texas Pacific Railroad. 3
12	53, 66	**SAINT JOSEPH AND WESTERN—Kansas—operated by the Union Pacific Railway Company.	Elwood or West Saint Joseph, Kans.	Hastings, Kans..... 2
13	56	SAINT LOUIS AND SAN FRANCISCO.	Springfield, Mo., via Canadian River, Albuquerque, the Aqua Fria and Colorado Rivers.	Pacific Ocean, with a branch from the Canadian River to western boundary of Arkansas, at or near Van Buren, Ark. ...
14	61	TEXAS AND PACIFIC—Jefferson and Southern Division.	A point near Marshall, Tex., via El Paso, to southern boundary of California, thence.	San Diego, Cal.....
15	63	*UNION PACIFIC—Union Division.	Council Bluffs, Iowa....	Ogden, Utah..... 1,0
16	30, 64	*UNION PACIFIC—Kansas Division.	Kansas City, Mo.....	Denver, Colo..... 6
17	22, 65	*UNION PACIFIC—Cheyenne Division.	Denver, Colo.....	Cheyenne, Wyo..... 1
18	53, 66	**UNION PACIFIC—Saint Joseph and Western Railroad Division.	Elwood or West Saint Joseph, Kans.	Hastings, Kans..... 2
19	69	WESTERN OREGON—Oregon..	(Portland, via Forest Grove. (Forest Grove	McMinnville, Oreg..... Astoria

* The amounts due for military transportation over railroads designated by a star, thus *, are retained and applied by the Secretary of the Treasury in liquidating the interest and principal of the bonds issued by the United States to aid in the construction of the roads. Accounts for such transportation properly prepared and certified by the quartermaster, should be forwarded to the Quartermaster General of the Army for examination and reference to the accounting officers of the Treasury.

** The amounts due for transportation over railroads designated thus ** are retained by the Secretary of the Treasury, under the opinion of the Attorney-General of June 18, 1880 (see page 9 of this report) on account of bonds, and interest thereon, issued by the United States to the companies now operating the roads.

† For conditions of grant to that portion of the Northern Pacific Railroad between Duluth and Northern Pacific Junction, see No. 33, in table No. 1, and note thereto, also note to No. 39 in said table.

ively, when so required by the Government of the United States."—*Act of July 26, 1866, section 1.*

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Act of June 10, 1862, section 2.*

"And be it further enacted, That said Atlantic and Pacific Railroad, or any part thereof, shall be a post route and military road, subject to the use of the United States for postal, military, naval, and all other government service, and also subject to such regulations as Congress may impose restricting the charges for such government transportation."—*Act July 27, 1864, section 11.*

"And be it further enacted, That the directors of said company shall, from time to time, fix, determine, and regulate the fares, tolls, and charges to be received and paid for transportation of persons and property on said road, or any part thereof."—*Section 13.*

"Provided, That said company shall not charge the government higher rates than they do individuals for like transportation and telegraphic service."—*Section 5.*

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Acts of March 3, 1857, section 3, May 15, 1864, section 5, and of March 3, 1865, section 5.*

"And the said railroad shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States."—*Acts of March 3, 1857, section 3, and March 3, 1865, section 5.*

55	SAINT LOUIS AND SAN FRANCISCO. (Formerly the Southwest Branch Pacific Railroad of Missouri, and Atlantic and Pacific Railroad—Missouri.)	Saint Louis, Mo.....	2404	33	3	June 10, 1862	10	423
						June 5, 1862	12	74
						June 16, 1874	13	463
						Mar. 3, 1875	18	800
						Mar. 3, 1879	21	202
56	SAINT LOUIS AND SAN FRANCISCO. (Formerly Atlantic and Pacific.)	Springfield, Mo., via Canadian River, Albuquerque, the Arroyo and Colorado Rivers	Pacific Ocean, with a branch from the Canadian River to the western boundary of Arkansas, or near Van Huren, Ark.	13	4	July 27, 1866	14	19
						Apr 20, 1871	17	
57	SAINT PAUL AND DULUTH. (Formerly Lake Superior and Mississippi, Saint Paul and Stillwater, Saint Paul and Pacific, and Minnesota Pacific—Minnesota.)	Saint Paul, Minn.....	Duluth, Minn.....	34	3	Mar. 3, 1857	11	195
		Branch from White Bear Lake	Stillwater, Minn.....			May 15, 1864	13	64
						Mar. 3, 1865	13	328
						July 13, 1866	14	96
						July 13, 1866	14	97
						June 16, 1874	14	74
						Mar. 3, 1875	18	453
						Mar. 3, 1879	21	200
						Mar. 3, 1857	11	195
						Mar. 3, 1865	13	628
						July 3, 1866	14	97
						June 10, 1874	18	74
						Mar. 3, 1875	18	453
						Mar. 3, 1879	21	200
58	SAINT PAUL, MINNEAPOLIS AND MANITOWA—Breckinridge Division. (Formerly Saint Paul and Pacific—Minnesota.)	Saint Paul, Minn.....	Breckinridge, Minn.....	35	3	Mar. 3, 1857	11	195

* This portion of the Southern Pacific Railroad is operated by the Central Pacific Railroad Company, which see.

† This road is now operated as the Saint Joseph and Western Division of the Union Pacific Railroad, which see. The town of Elwood is presumed to be West Saint Joseph given in the Railway Guide.

‡ That portion of the Saint Paul, Minneapolis and Manitoba Railroad between Breckinridge and Barnesville is not a land-grant road.

TABLE No. 5.—Containing a list of the Pacific Railroads to which bonds of the United States have been issued, &c.—Continued.

Running number.	Name of company to which bonds of the United States were issued.	Main line.		Branches, and leased and operated lines.		Running number.	Miles.
		From—	To—	Name of road and division.	From—	To—	
2	CENTRAL PACIFIC RAILROAD.—Operated by Missouri Pacific Railway Company (See Central Branch division of M. P. R. R.) Bonded and leased grants from Atchison, Mo., to Waverly, Kans., 1,000 miles.	Atchison Kans.	Kirwin, Kans.	242	9	San José Branch Consolidated with the C. P. R. R. Bonded and land grant from Niles to Tracy.	72
						Stockton and Copperopolis R. R. Leased by C. P. R. R. Not subsidized.	34
						Visalia Division—Main line from San Francisco to Lathrop, via West Oakland, Martinez, and Tracy (See Nos. 3 and 8.) From Lathrop to Goshen consolidated with C. P. R. R. From Goshen to Tulare, leased from S. P. R. R. C. Land grant only from Goshen to Tulare.	8 157
						Southern Pacific R. R. of California. Leased. Land grant.	480
						San Diego Division.	33
						Wilmington Division.	22
						Los Angeles and Independent R. R.	18
						Goshen Division.	40
						Southern Pacific R. R. of Arizona. Operated	7
						Washington Branch. Not subsidized	33
						Jewell Branch. Not subsidized.	34
						Republican Valley Branch. Not subsidized.	11
						Lawrenceworth Branch. Not subsidized.	11

40	49	43	3	2	4	5	1	107 1/2	Fremont, Nebr	Stout City, Iowa via California Junction in- cluding six miles of road from California Junc- tion to Missouri Valley Junction Council Bluffs, Iowa	Carbonale Branch. Not subsidized.	Carbonale, Kans	33
										Land grant and bonded for 101 1/2 miles from Stout City	Beloit, Kans	58	
											McPherson Branch. Not subsidized	McPherson, Kans	36
											Fremont, Nebr	Oakdale, Nebr	109
											Colorado Divisions (for merly Colorado Central). Broad gauge. Not sub- sidized. Narrow gauge	Denver	138
											Golden, via Forks Creek.	Central City	24
											Forks Creek	Georgetown	25
											Valley Station	Stromsburg	90
											Valparaiso	Lincoln	30
											Jackson	Norfolk	48
											Ogden, Utah	Red Rock	304
											Saint Joseph Branch from Marysville.	Grand Island	252
											Kansas City, Mo	Denver, Colo	638 1/2
											Leavenworth, Kans.	Lawrence, Kans	34
											Junction City, Kans.	Concordia	70
											Georgetown Branch, narrow gauge. Not subsidized.		
											Omaha and Republican Val- ley R. R. Not subsidized.		
											Omaha, Niobrara and Black Hills R. R. Not subsidized.		
											Utah and Northern Railway		
											Saint Joseph, and Western, formerly Saint Joseph and Denver City Land-grant from West Saint Joseph to Hastings only		
											Kansas Pacific Railway and branches (See No. 3, K. P. R. R.) subsidized in part.		
											Leavenworth Branch. Not subsidized		
											Junction City and Ft. Kear- ney Branch. Not subsidized.		

ated as a part of the Union Pacific Railway Com-
pany's lines. Land grant
for 638 1/2 miles bonded
for 193 1/2 miles only, but
subject to the conditions
of the acts of July 1, 1862,
July 2, 1864, and March 3,
1873 in respect of trans-
portation throughout its
entire length. (See deci-
sion of Supreme Court,
October term 1878 and
opinion of Attorney Gen-
eral of June 18, 1880.)

STOUT CITY AND PACIFIC —
Land grant and bonded
for 101 1/2 miles from Stout
City

UNION PACIFIC — Union
Division Land grant and
bonded

NOTE: The Union Pacific
Railroad extends five miles
west of Ogden but those
five miles of road are lea-
sed to and operated by the
Central Pacific Railroad
Company as a part of its
main line

TABLE No. 5.—Containing a list of the Pacific railroads to which bonds of the United States have been issued, &c.—Continued.

Running number. (Corresponding to table No. 1.)	Name of company to which bonds of the United States were issued.	Main line.		Branches, and leased and operated lines.			
		Termini.		Name of road or division.	Termini.		Miles.
		From—	To—		From—	To—	
	UNION PACIFIC—Union Division.—Continued.			**Carbondale Branch. Not subsidized.	Lawrence, Kans.	Carbondale, Kans.	32
				**Solomon Branch. Not subsidized.	Solomon, Kans.	Beloit, Kans.	58
				**McPherson Branch. Not subsidized.	Salina, Kans.	McPherson, Kans.	36
				**Cheyenne Division. Not subsidized. Embracing the Denver Pacific.	Denver, Colo.	Cheyenne, Colo.	105 1/2
				Boulder Branch.	Denver, Colo.	Boulder, Colo.	46
				Boulder and Caribou Branch.	Boulder.	Marshall.	6

* Accounts for transportation over all railroads designated thus * to be presented to the depot quartermaster at San Francisco, Cal., and by him to be properly prepared, certified, and forwarded to the Quartermaster-General.

* No payment can be made for transportation over this railroad. (No. 6 in table No. 1, and No. 1 in table No. 2.)

† Accounts for transportation over all railroads designated thus † to be presented to the depot quartermaster at Chicago, Ill., and by him to be properly prepared, certified, and forwarded to the Quartermaster-General.

** Accounts for transportation over all railroads designated thus ** to be presented to the chief quartermaster, department of the Platte, Omaha, Nebra., and by him to be properly prepared, certified, and forwarded to the Quartermaster-General.

NOTE.—Any extension of the above-named railroads, branches, leased or operated lines, if controlled and operated by the companies controlling the Bonded Pacific Railroads, and any new roads which may hereafter be owned, leased, or controlled and operated by said Pacific Railroad Companies, will be subject to the foregoing regulations.

D.

[General Orders No. 57.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT GENERAL'S OFFICE,
Washington, June 22, 1881.

tion of the Secretary of War the following regulations are published for the
 n and guidance of officers of the Quartermaster's Department :

of February 21, 1881, entitled "An act making appropriations for the sup-
 Army for the fiscal year ending June thirtieth, eighteen hundred and eighty-
 or other purposes," enacts as follows :

a payment for Army transportation lawfully due such land-grant railroads
 t received aid in government bonds, to be adjusted by the proper account-
 in accordance with the decisions of the Supreme Court in cases decided
 a land-grant acts, but in no case shall more than fifty per cent. of the full
 the service be paid until a final judicial decision shall be had in respect of each
 pute, one hundred and twenty-five thousand dollars: *Provided*, That such
 hall be accepted as in full of all demands for said services."

erly carry out the foregoing provision of law without prejudice to the rights
 road companies, so much of paragraphs 10 and 16 of General Orders No. 69,
 General's Office, of 1880, as requires officers issuing bills of lading and re-
 transportation over any of the railroads named in Table No. 3 of said order
 ereon, and on the certificate provided for in paragraph 16 of said order,
ment for the transportation is forbidden by law" (paragraphs 1978, 2050, and
 tied Regulations), is hereby suspended so far as the same is applicable to
 ansportation services for the fiscal year ending June 30, 1882.

s which may be presented to officers of said department for payment, under
 ferred to, for such transportation services should be prepared in the proper
 orwarded to the Quartermaster-General for settlement through the account-
 of the Treasury.

MAND OF GENERAL SHERMAN :

B. C. DRUM,
Adjutant General

Abstract of contracts for wagon transportation entered into by the Quartermaster's Department, received at the office of the Quartermaster-General, during the fiscal year ending June 30, 1881.

Contracting officer.	Contractor.	Date of contract.	Route of supply.	Rates.	Date of expiration of contract.
Capt. E. B. Gibbs, assistant quartermaster, Saint Paul, Minn.	Henry C. Waite.....	Mar. 30, 1881	Transportation in the Territory of Montana.	Per 100 pounds per 100 miles, April, 1881, \$1.25; May, June, July, October, and November, \$1.48; August, \$1.30; September, \$1.40; and December, \$1.45; January 1882, \$1.35; February, \$1.20, and March, \$1.	Mar. 31, 1882
Do.....	do.....	do.....	Transportation in the State of Minnesota or the Territory of Dakota.	Per 100 pounds per 100 miles, April, 1881, \$1.25; May, and June, \$1.20; July, and August, \$1; September, \$1.25; October, \$1.30; November, and December, \$1.40; January, 1882, \$1.35; February, \$1; and March, 75 cents.	Mar. 31, 1882
Lieut. Col. R. Saxton, chief quartermaster, Military Division of the Pacific and Department of California, San Francisco, Cal.	D. W. Earl.....	April 8, 1881	Route No. 1: Between Reno, Nev., and Fort Bidwell, Cal., 192 miles.	\$4.25 per 100 pounds for the whole distance from April 1, to October 31, inclusive, and \$5.75 from November 1 to March 31, inclusive.	June 30, 1882
Do.....	Eli Reinhart.....	April 7, 1881	Route No. 2: Between Winnemucca, Nev., and Boise Barracks, Idaho, 270 miles.	\$3.85 per 100 pounds for the whole distance from April 1 to October 31, inclusive, and \$6.60 from November 1 to March 31, inclusive;	June 30, 1882
Maj. R. N. Batchelder, depot quartermaster San Francisco, Cal.	Christopf Mohrmann.....	April 25, 1881	Hauling in San Francisco, Cal., and vicinity.	Various.....	June 30, 1882
Col. L. C. Easton, depot quartermaster, New York City.	Louis Kaden.....	June 30, 1880	Hauling in New York City, and vicinity.	Various.....	June 30, 1881
Maj. M. I. Ludington, chief quartermaster Department of the Platte, Fort Omaha, Nebr.	John Fonner and Fred. A. Sears.....	May 1, 1880	Between Grand Island, Nebr., and Fort Niobrara, Nebr.	\$1.10 per 100 pounds per 100 miles.....	June 30, 1880
Do.....	George H. Jewett.....	May 1, 1880	Between Oakdale, Nebr., and Niobrara, Nebr., 164.	\$1.20 per 100 pounds per 100 miles.....	June 30, 1880
Do.....	George H. Jewett.....	June 1, 1880	Between Oakdale, Nebr., and Niobrara, Nebr., 164 miles.	Per 100 pounds for the whole distance, \$1.87½ for July, August, September, and October, 1880, May and June, 1881, and \$2.34 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Do.....	Do.....	Do.....	Revenue depot, Wyo., and 10'00, 296 miles.	Per 100 pounds for the whole distance, \$3.61 for July, August, September, and October, 1880, May and June, 1881, and \$4.51 for November, 1880, and December, 1881.	June 30, 1881

Nebr.	Do.....	John W. Hugus	June 1, 1880	Between Fort Fred Steele, Wyo., and Fort Washakie, Wyo., 140 miles.	and December, 1880, January, February, March, and April, 1881. Per 100 pounds for the whole distance \$1 44 for July, August, September, and October, 1880, May and June, 1881 and \$3.99 for November and December, 1880, January, February, March, and April, 1881	June 30, 1881
Do.....	Do.....	do	80	Between Fort Fred Steele, Wyo., and Camp on White River, Colo., 144 miles.	Per 100 pounds for the whole distance \$1 79 for July, August, September, October, and November, 1880, and June, 1881, \$4 34 for December, 1880, January, February and March, 1881, \$2.55 for April and \$2 11 for May, 1881	June 30, 1881
Do.....	Do.....	Augustus Trabing and Charles Trabing.	June 1, 1880	Between Rawlins, Wyo., and Camp on White River, Colo., 144 miles.	Per 100 pounds, for the whole distance, 1880 July, \$2 August, \$2; September, \$2, October, \$2 25, November, \$2.50. 1881 April, \$3, May, \$2.50 June, \$2.25.	June 30, 1881
Do.....	Do.....	Hugh McCorkindale	June 21, 1880	Between Milford, Utah, and Fort Cameron, Utah, 36 miles.	50 cents per 100 pounds for the whole distance	June 30, 1881
Do.....	Do.....	John M. Thayer	June 1, 1880	Between Rock Creek Station, Wyo., and Fort McKinney, Wyo., 226 miles.	Per 100 pounds, for the whole distance, 1880-July, \$1 79, August, \$1 78 September, \$1 79; October, \$1 82, November \$2 15; December, \$3 25. 1881 January, \$3 25, February, \$3 25, March, \$3 25, April, \$2 50, May, \$1.98, June, \$1.79.	June 30, 1881
Do.....	Do.....	do	June 1, 1880	Between Grand Island, Nebr., and Fort Niobrara, Nebr., 194 miles.	Per 100 pounds, for the whole distance, 1880: July, \$1 74, August, \$1 74 September \$1 74; October, \$1 84, November, \$2 December, \$3 1881 January, \$3 February, \$3 March, \$2.75; April, \$2 May, \$1 90, June, \$1 74	June 30, 1881
Do.....	Do.....	C. E. Clay and John Hunton	May 21, 1881	Between Cheyenne Depot, Wyo., and Fort McKinney, Wyo., 226 miles.	Per 100 pounds, for the whole distance, 1881 July, \$3 30 August, \$1 50, September, \$3.50; October \$4.25 November, \$5 December, \$5. 1882 January, \$5 February, \$5, March, \$5, April, \$4 50, May, \$4, June \$3 50.	June 30, 1882
Do.....	Do.....	do	May 21, 1881	Between Rock Creek, Wyo., and Fort McKinney, Wyo., 226 miles.	Per 100 pounds, for the whole distance, 1881: July \$2.25 August, \$2 25, September, \$2.25, October, \$2.25, November, \$3 1882 May, \$3, June, \$2 25.	June 30, 1882
Do.....	Do.....	James Stephenson and James F. McCartney.	May 21, 1881	Between Neligh, Nebr., and Fort Niobrara, Nebr., 158 miles.	\$1.85 per 100 pounds, for the whole distance.....	June 30, 1882
Do.....	Do.....	George H. Jewett ..	May 21, 1881	Between Sidney, Nebr., and Fort Robinson, Nebr., 120 miles.	Per 100 pounds, for the whole distance, \$1.48 for July, August, September, and October, 1881, May and June, 1882, and \$2 20 for November, December 1881, January, February, March, and April, 1882.	June 30, 1882
Maj. M. I. Ludington, chief quartermaster Department of the Platte, Fort Omaha, Nebr.	Do.....	C. W. Lyman	May 21, 1881	Between Milford, Utah, and Fort Cameron, Utah, 36 miles.	35¢ cents per 100 pounds for the whole distance....	June 30, 1883

Abstract of contracts for wagon transportation, entered into by the Quartermaster's Department, &c.—Continued.

Contracting officer.	Contractor.	Date of contract.	Route of supply.	Rates.	Date of expiration of contract.
Maj. M. I. Ludington, chief quartermaster Department of the Platte, Fort Omaha, Nebr.	James K. Moore	June 1, 1881	Between Fort Fred Steele, Wyo., and Fort Washakie, Wyo., 145 miles.	Per 100 pounds for the whole distance—\$1.75 for July, August, September, October, and November, 1881, May and June, 1882, and \$4.65 for December, 1881, January, February, March, and April, 1882.	June 30, 1882
Lieut. Col. J. G. Chandler, chief quartermaster Department of the South, Newport Barracks, Ky.	Crawford Monroe	July 2, 1880	Hauling in Atlanta, Ga., and vicinity.	Various, 27½ cents per 1,000 pounds—less than 1,000 pounds, 25 cents.	June 30, 1881
Capt. M. J. Grealish, acting assistant quartermaster Augusta Arsenal, Ga.	Enoch D. Reese	July 12, 1880	Hauling in Augusta Arsenal, Ga.	\$1.00 per 1,000 pounds	June 30, 1881
Do.	Anne Woods	May 31, 1881	Hauling in Augusta Arsenal, Ga.	\$2.00 per 1,000 pounds	June 30, 1882
Maj. Geo. H. Weeks, chief quartermaster Department of Arizona, Whipple Barracks, Prescott, Ariz.	Pinckney R. Tully	June 1, 1880	Route No. 1	8½ cents per 100 pounds for the whole distance.	June 30, 1881
			Tucson, Ariz., to Fort Lowell, Ariz., 7 miles.		
			Benson, Ariz., to Fort Bowie, Ariz., 56 miles.	68½ cents per 100 pounds for the whole distance.	
			Benson, Ariz., to Fort Grant, Ariz., 59 miles.	67½ cents per 100 pounds for the whole distance.	
			Benson, Ariz., to Camp Huachuca, Ariz., 37 miles.	38½ cents per 100 pounds for the whole distance.	
			Benson, Ariz., to Camp John A. Rucker, Ariz., 72 miles.	79½ cents per 100 pounds for the whole distance.	
			Benson, Ariz., to Camp Thomas, Ariz., 99 miles.	\$1.13 per 100 pounds for the whole distance.	
			Fort Lowell, Ariz., to Tucson, Ariz., 7 miles.	4½ cents per 100 pounds for the whole distance.	
			Fort Bowie, Ariz., to Benson, Ariz., 56 miles.	34½ cents per 100 pounds for the whole distance.	
			Fort Grant, Ariz., to Benson, Ariz., 59 miles.	33½ cents per 100 pounds for the whole distance.	
			Camp Huachuca, Ariz., to Benson, Ariz., 37 miles.	19½ cents per 100 pounds for the whole distance.	
			Camp John A. Rucker, Ariz., to Benson, Ariz., 72 miles.	39½ cents per 100 pounds for the whole distance.	
			Camp Thomas, Ariz., to Benson, Ariz., 99 miles.	56½ cents per 100 pounds for the whole distance.	
Do.	Isaac S. Randol	June 1, 1880	Route No. 2 .....	.....	June 30, 1881
			Maricopa, Ariz., to Fort Apache, Ariz., 427 miles.	\$8.54 per 100 pounds for the whole distance.	
			Maricopa, Ariz., to Fort McDowell, Ariz., 51 miles.	65 cents per 100 pounds for the whole distance.	

Lieut. W. W. Wetherspoon, acting assistant quartermas- ter Whipple Barracks, Pres- cott, Ariz.	Isaac S. Randol	June 5, 1881	Maricopa, Ariz., to Whipple Depot, 103 miles.	\$3.30.76 per 100 pounds for the whole distance.	June 30, 1882
Do	Isaac S. Randol	June 5, 1881	Whipple Depot, Ariz., to Fort Mo- dowell, Ariz., 102 miles.	\$1.50 per 100 pounds for the whole distance.	June 30, 1882
Maj. Wm. Myers, depot quar- termaster, Chicago, Illa.	John B. Nycum	July 1, 1880	Whipple Depot, Ariz., to Fort Mo- dowell, Ariz., 103 miles.	\$3.20 per 100 pounds for the whole distance.	June 30, 1881
Lieut. Col. J. D. Bingham, chief quartermaster Depart- ment of the Missouri, Fort Leavenworth, Kans.	Wm. C. Duxbury	May 14, 1880	Whipple Depot, Ariz., to Fort Verde, Ariz., 46 miles.	70 cents per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 29, 1880	Fort Apache, Ariz., to Maricopa, Ariz., 427 miles.	\$4.37 per 100 pounds for the whole distance.	June 30, 1881
Do	W. M. D. Lee	May 8, 1880	Fort McDowell, Ariz., to Maricopa, Ariz., 34 miles.	32½ cents per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 29, 1880	Fort Verde, Ariz., to Maricopa, Ariz., 208 miles.	\$1.54.96 per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Whipple Depot, Ariz., to Maricopa, Ariz., 182 miles.	\$1.19.80 per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Fort McDowell, Ariz., to Whipple Depot, Ariz., 102 miles.	75 cents per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Fort Mojave, Ariz., to Whipple Depot, Ariz., 165 miles.	\$1.60 per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Fort Verde, Ariz., to Whipple De- pot, Ariz., 46 miles.	35 cents per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Route No. 1, from Maricopa, Ariz., to Fort Verde, Ariz., 208 miles.	\$3.35 per 100 pounds for the whole distance	June 30, 1882
Do	Edward Fenlon	May 29, 1881	Route No. 2, from Brigham City, Ariz., to Fort Mojave, Ariz., 329 miles.	\$6.58 per 100 pounds for the whole distance	June 30, 1882
Do	Edward Fenlon	May 29, 1881	Hauling in the city of Chicago and vicinity.	24 cents per 100 pounds	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Route No. 1, between Galneville, Tex., and Fort Still, Ind. T., 116 miles.	85 cents per 100 pounds for the whole distance	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Route No. 2, between Wellington, Kans., and Fort Reno, Ind. T., 133 miles.	98 cents per 100 pounds for the whole distance ..	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Route No. 3, between Dodge City, Kans., and Fort Elliott, Tex., 165 miles.	\$1.38 per 100 pounds for the whole distance	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Route No. 4, between Las Vegas, N. Mex., and Fort Bliss, Tex., 337 miles.	\$5.62 per 100 pounds for the whole distance	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Route No. 5, between Las Vegas, N. Mex., and Fort Stanton, N. Mex., 180 miles.	\$2.70 per 100 pounds for the whole distance	June 30, 1881
Do	Edward Fenlon	May 29, 1881	Route No. 6, between Las Vegas, N. Mex., and Fort Lowell, Ariz., 526 miles.	\$7.89 per 100 pounds for the whole distance	June 30, 1881

Abstract of contracts for wagon transportation, entered into by the Quartermaster's Department, &c.—Continued.

Contracting officer.	Contractor.	Date of contract.	Route of supply.	Rate.	Date of expiration of contract.
Lieut Col. J. D. Bingham, chief quartermaster Department of the Missouri, Fort Leavenworth Kans.	Edward Fenlon	May 20, 1881	Route No. 7, between Las Vegas, N. Mex., and Prescott, Ariz., 400 miles.	\$6.98 per 100 pounds for the whole distance.	June 30, 1881
Do	Edward Fenlon	May 20, 1881	Route No. 8, between Alamosa, Colo., and Fort Lewis, Colo., 103 miles.	\$2.75 per 100 pounds for the whole distance.	June 30, 1881
Maj C. G. Sawtelle, chief quartermaster Department of the Columbia, Vancouver Barracks, Wash.	C. H. Montgomery.	June 19, 1880	Route No. 1, between Walla Walla, Wash., and Fort Colville, Wash., 208 miles.	\$3.35 per 100 pounds for the whole distance for July, August, September, and October, 1880, May and June, 1881, and \$4.38 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Do	C. H. Montgomery.	June 19, 1880	Route No. 2, between Palouse Landing, Wash., and Fort Colville, Wash., 154 miles.	\$2.38 per 100 pounds for the whole distance for July, August, September, and October, 1880, May and June, 1881, and \$4.25 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Do	D. W. Small, and J. E. Putnam.	June 25, 1880	Route No. 3, between Walla Walla, Wash., and Camp Howard, Idaho, 144 miles.	\$3.85 per 100 pounds for the whole distance for July, August, September, and October, 1880, May and June, 1881, and \$5.90 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Do	D. W. Small and J. E. Putnam.	June 25, 1880	Route No. 4, between Lewiston, Idaho, and Camp Howard, Idaho, 60 miles.	\$1.97 per 100 pounds for the whole distance for July, August, September, and October, 1880, May and June, 1881, and \$3.38 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Do	William P. Welles . . .	June 19, 1880	Route No. 5, between Walla Walla, Wash., and Fort Cœur d'Alene, Idaho, 162 miles.	\$3.88 per 100 pounds for the whole distance from November 1, 1880, to April 30, 1881.	Apr. 30, 1881
Do	Benjamin Bargaruder.	June 19, 1880	Route No. 5, between Walla Walla, Wash., and Fort Cœur d'Alene, Idaho, 162 miles.	\$2.68 per 100 pounds for the whole distance for July, August, September, and October, 1880, May and June, 1881.	June 30, 1881
Do	do	June 19, 1880	Routes No. 6 and 7, between Palouse Landing or Tasse Landing, Wash., and Fort Cœur d'Alene, Idaho, 120 and 109 miles, respectively.	\$2.37 per 100 pounds for the whole distance, for July, August, September, and October, 1880, May and June, 1881, and \$3.63 for November and December 1880, January, February, March, and April, 1881.	June 30, 1881
Do	Robert M. Thatcher.	June 19, 1880	Route No. 8, between Roseburg, Oreg., and Fort Klamath, Oreg., 214 miles.	\$3.24 per 100 pounds for the whole distance, for July, August, September, and October, 1880, May and June, 1881, and \$7.47 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881

Do.....	do	June 25, 1880	Route No. 10, between White Bluffs, Wash., and Camp Chelan, Wash., 103 miles.	and November, 1880, January, February, March, and April, 1881.	June 30, 1881
Do.....	do	June 25, 1880	Route No. 11, between Ainsworth, Wash., and Camp Chelan, Wash., 146 miles.	\$3.50 per 100 pounds for the whole distance, for July, August, September, and October, 1880, May and June, 1881, and \$7 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Do.....	do	June 25, 1880	Route No. 14, between Walla Walla, Wash., and Fort Lapwai, Idaho, 96 miles.	\$5.30 per 100 pounds for the whole distance, for July, August, September, and October, 1880, May and June, 1881, and \$8.75 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Maj. B. C. Card, chief quar- master Department of Texas, San Antonio, Tex.	John E. Barlow	June 1, 1880	Route No. 1, from Fort Worth, Tex., to Fort Davis, Tex., 461 miles; to Fort Stockton, Tex., 389 miles; to Fort Griffin, Tex., 133 miles; to Fort McKavett, Tex., 210 miles; to Fort Concho, Tex., 200 miles.	\$2.18 per 100 pounds for the whole distance, for July, August, September, and October, 1880, May and June, 1881, and \$2.80 for November and December, 1880, January, February, March, and April, 1881.	June 30, 1881
Do.....	do	June 1, 1880	Route No. 4, from Waco, Tex., to Fort Concho, Tex., 215 miles; to Fort Davis, Tex., 476 miles; to Fort McKavett, Tex., 200 miles; to Fort Stockton, Tex., 404 miles.	\$1 per 100 pounds per 100 miles.....	June 30, 1881
Maj. W. B. Hughes, chief quar- termaster Department of Texas, San Antonio, Tex.	James S. Millpaugh ...	June 1, 1881	Route No. 1, from Abilene, Tex., to Fort Davis, Tex., 335 miles; to Fort Stockton, Tex., 283 miles; to Fort Griffin, Tex., 64 miles; to Fort McKavett, Tex., 135 miles; to Fort Concho, Tex., 94 miles.	\$1.02 per 100 pounds per 100 miles.....	June 30, 1882
Do.....	Robert Wulfang	May 24, 1881	Route No. 2..... From Austin to— Fort Clark, 206 miles; Fort Concho, 215 miles; Fort Davis, 459 miles; Fort Duncan, 235 miles; Fort McIntosh, 245 miles; Fort McKavett, 185 miles; Fort Stockton, 387 miles; San Antonio, 80 miles; San Diego, 214 miles; San Felipe, 236 miles; Pena Colorado, 452 miles; Mouth Rio Pecos, 281 miles; Mayer's Spring, 335 miles.	64½ cents per 100 pounds per 100 miles.....	June 30, 1882

Abstract of contracts for wagon transportation, entered into by the Quartermaster's Department, &c.—Continued.

Contracting officer.	Contractor.	Date of contract.	Route of supply.	Rates.	Date of expiration of contract.
Maj. W. B. Hughes, chief quartermaster Department of Texas, San Antonio, Tex.	Robert Wulfang.....	May 24, 1881.	From San Antonio to— Fort Clark, 126 miles; Fort Concho, 205 miles; Fort Davis, 449 miles; Fort Duncan, 155 miles; Fort McIntosh, 165 miles; Fort McKavett, 155 miles; Fort Stockton, 377 miles; San Antonio, — miles; San Diego, 134 miles; San Felipe, 156 miles; Pena Colorado, 442 miles; Mouth Rio Pecos, 201 miles; Mayer's Spring, 255 miles. From Cuero to— Fort Clark, 206 miles; Fort Concho, 285 miles; Fort Davis, 529 miles; Fort Duncan, 235 miles; Fort McIntosh, 245 miles; Fort McKavett, 235 miles; Fort Stockton, 457 miles; San Antonio, 80 miles; San Diego, — miles; San Felipe, 236 miles; Pena Colorado, 522 miles; Mouth Rio Pecos, 281 miles; Mayer's Spring, 335 miles. Route No. 4..... From Waco, Tex. to— Fort Concho, Tex., 215 miles; Fort Davis, Tex., 476 miles; Fort McKavett, Tex., 200 miles; Fort Stockton, Tex., 404 miles. Route No. 5: From Corpus Christi to— San Diego, Tex., or return.....	64½ cents per 100 pounds per 100 miles	June 30, 1882
	John E. Barlow	June 1, 1881.	Route No. 4..... From Waco, Tex. to— Fort Concho, Tex., 215 miles; Fort Davis, Tex., 476 miles; Fort McKavett, Tex., 200 miles; Fort Stockton, Tex., 404 miles. Route No. 5: From Corpus Christi to— San Diego, Tex., or return.....	\$1.05 per 100 pounds per 100 miles.....	June 30, 1882
	Uriah Lott.....	June 1, 1881.	Fort McIntosh or return..... Fort Duncan or return..... Fort Ringgold or return..... Galveston or return..... New Orleans, La., or return..... Fort Ringgold and Duncan..... Fort McIntosh..... Employed in the construction of buildings at Fort Assinaboine, Mont. Territory.	50 cents per 100 pounds for the distance. Horses and mules \$3.00 each. 95 cents per 100 pounds for the distance. \$1.40 per 100 pounds for the distance. 75 cents per 100 pounds for the distance. 85 cents per 100 pounds for the distance. 50 cents per 100 pounds for the distance. 70 cents per 100 pounds per 100 miles. 64 cents per 100 pounds per 100 miles. \$4.67 per day for each team of three yokes of oxen and for each additional yoke of cattle (making the teams four yoke of cattle each \$1 per day.)	June 30, 1882
Lieut. Col. C. H. Tompkins, chief quartermaster Department of Dakota, Saint Paul, Minn.	Nehemiah P. Clark....	July 12, 1880			The period the work shall be in progress

Do.....	Do.....	June 20, 1861	Hauling, in and around Jeffersonville, Ind.	Jeffersonville, Ind.; 10 cents for each 100 lbs. part of Louisville, Ky., known as Portland, Ky.; 10 cents to and from any part of the city New Albany, Ind.	June 20, 1863
Col. R. Ingalls, assistant quartermaster-general in charge of depot, New York city.	Abram Winters and Solomon Winterbottom.	June 20, 1861	Hauling, in and around New York City.	As above.....	June 20, 1863
Maj B. C. Card, chief quartermaster Department of Texas, San Antonio, Tex.	James Callaghan and Hardin B. Adams.	June 1, 1860.	Route No. 2..... From Austin to— Fort Clark, 306 miles; Fort Concho, 215 miles; Fort Davis, 477 miles; Fort Duncan, 285 miles; Fort McIntosh, 245 miles; Fort McKavett, 185 miles; Fort Stockton, 404 miles; San Antonio, 80 miles; San Diego, 214 miles; San Felipe, 236 miles; Pena Colorado, 427 miles; Mason, 105 miles. From San Antonio to— Fort Clark, 126 miles; Fort Concho, 205 miles; Fort Davis, 697 miles; Fort Duncan, 155 miles; Fort McIntosh, 105 miles; Fort McKavett, 155 miles; Fort Stockton, 394 miles; San Antonio, — miles; San Diego, 124 miles; San Felipe, 156 miles; Pena Colorado, 347 miles; Mason, — miles. From Cuero to— Fort Clark, 206 miles; Fort Concho, 285 miles; Fort Davis, 477 miles; Fort Duncan, 235 miles; Fort McIntosh, 245 miles; Fort McKavett, 235 miles; Fort Stockton, 474 miles; San Antonio, 80 miles; San Diego, — miles; San Felipe, 236 miles; Pena Colorado, 427 miles; Mason, — miles.	For 5 barrels of pork or 7 barrels of flour or 1,500 pounds weight, or 30 cubic feet measurement, or a fraction of these, 22 cents for 1 mile or less; 24 cents for more than 1 mile and not exceeding 2 miles; 30 cents for more than 2 miles and not exceeding 3 miles, and for a distance of 30 miles, 30 cents for the first 3 miles, and 20 cents for each additional mile. 30 cents per 100 pounds per 100 miles.....	June 20, 1861

Respectfully submitted.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. A.

F.—Abstract of contracts for water transportation, entered into by the Quartermaster's Department, received at the Quartermaster General's Office during the fiscal year ending June 30, 1881.

Names of officers.	Names of contractors.	Date of contract.	Route of supply.	Rates.	Date of expiration of contract.
Capt. E. B. Gibbs, assistant quartermaster, U. S. A. .....Do.....	Henry C. Akin..... Joseph Leighton.....	Mar. 28, 1881 Apr. 1, 1881	From Yankton, Dak. T., to Fort Benton, Mont. T., and intermediate points. From Bismarck, Dak. T., and Fort Buford, Dak. T., on the Missouri River, to Glendive, Fort Keogh, Big Horn Depot, Mont. T., and intermediate points on the Yellowstone River, and to any point on the Yellowstone River between Fort Buford, Dak. T., and Big Horn Depot, Mont. T.	Schedule rates..... .....do.....	Nov. 10, 1881 Close of navigation, 1881
Maj. B. C. Card, quartermaster, U. S. A.	Charles A. Whitney, president.	July 29, 1880	From New Orleans, La., or Morgan City, La., to Galveston, Indianola, Brazos Santiago, and Houston, Tex., or return, and from Galveston to Indianola and Brazos Santiago, Tex., or return. Between Astoria, Oreg., Forts Stevens and Canby.	.....do..... \$500 per month, \$9 per hour detention at Fort Stevens, \$6 per hour detention at Fort Canby, \$25 for extra trips to Fort Canby.	June 30, 1881 June 30, 1881
Maj. C. G. Sawtelle, quartermaster, U. S. A.	L. A. Loomis.....	June 26, 1880		Schedule rates.....	June 30, 1882
Maj. William B. Hughes, quartermaster, U. S. A.	William Kelly.....	June 1, 1880	Between Fort Brown, Brazos Santiago, Fort Ringgold, Santa Maria, and Edinburg, Tex.		

Respectfully submitted.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. Army.

Name.	Class.	Tonnage.	When purchased or built.	Estimated cost value.	By whom employed.	Where employed.	Amount paid for repairs.	Amount paid for running expenses.	Total expenses.
Henry Smith.....	Steamer	178. 70	June 30, 1876	\$26, 000 00	Col. Rufus Ingalls, assistant quartermaster-general.	New York Harbor	\$556 98	\$6, 915 08	\$7, 472 06
Ordnance	Propeller	75. 00	June 30, 1876	18, 000 00	Ordnance Board, Col. S. Crispin, president.	.....do	295 99	4, 563 22	4, 859 21
Atlantic	Steam tug	60. 31	Oct. 15, 1878	13, 865 56	Chief quartermaster Department of East and post quartermaster Fort Columbus.	Governor's Island, New York Harbor.	4, 631 50	6, 486 99	11, 118 49
Resolute.....	do	70. 30	Nov. 14, 1879	17, 947 46	Post quartermaster.....	Boston, Mass	1, 563 47	7, 001 85	8, 565 32
Thayer	Steam launch ..	32. 36	Oct. 8, 1874	7, 200 00	.....do	Fort Adams, R. I.....	201 68	2, 151 75	2, 353 43
Monroe	do	62. 35	Nov. 20, 1875	15, 200 00	.....do	Fort Monroe, Va.....	815 59	2, 494 29	3, 309 88
General Jesup	do	19. 37	June 30, 1874	5, 000 00	Lieut. Col. A. J. Perry, deputy quartermaster-general.	Governor's and David's Island, N. Y. H.	48 88	560 00	608 88
General Greene.....	do	25. 20	Mar. 3, 1874	5, 250 00	Post quartermaster.....	Fort McHenry, Md....	184 27	1, 333 45	1, 517 72
Barrancas	do	28. 01	Nov. 7, 1874	5, 750 00	.....do	Fort Barrancas, Fla ..	285 46	1, 015 00	1, 300 46
Matchless	Schooner	120. 00	June 5, 1863	13, 500 00	.....do	Key West, Fla.....	238 28	4, 104 67	4, 342 95
Hamilton	Steam launch ..	37. 68	Feb. 1, 1875	7, 800 00	Depot quartermaster, David's Island.	David's Island, N. Y. H	934 78	3, 478 37	4, 413 15
General Sherman	Steamboat	236. 72	April 30, 1877	19, 394 02	Capt. E. B. Kirk, assistant quartermaster-general.	Bismarck, Dak. T	752 46	26, 353 07	27, 105 53
General McPherson..	Propeller	104. 23	Sept. 1, 1867	40, 000 00	Lieut. Col. R. Saxton, deputy quartermaster-general.	San Francisco, Cal....	825 98	14, 990 55	15, 816 53
Chelan.....	Steam launch ..	15. 00	Nov. 28, 1879	3, 510 00	Post quartermaster	Camp Chelan, W. T....	.....	1, 319 00	1, 319 00
Amelia Wheaton.....	do	40. 00	.....	2, 750 00	do	Fort Coeur d'Alene, I. T	.....	300 00	300 00
Lillie Lee.....	do	40. 00	July 23, 1879	2, 500 00	do	Fort Totten, Dak. T...	167 55	.....	167 55
							11, 532 87	83, 067 29	94, 600 16

Respectfully submitted.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. A.

H.—Statement of vessels chartered, impressed, or employed by the Quartermaster's Department during the fiscal year ending June 30, 1881.

Name.	Class.	Tonnage	When chartered.	Period of service.		Where charter money is payable.	By whom put in service or employed.	Rate of pay.	Amount paid.	Total earnings
				From—	To—					
Thomas Riley	Steamer	(*)	July 1, 1880	July 1, 1880	Aug. 30, 1880	Governor's Island, New York Harbor.	Lieut. Col. A. J. Perry, deputy quartermaster-general.	\$50 per day.	\$3,050 00	\$3,050 00
Do	do	(*)	May 24, 1881	May 24, 1881	June 30, 1881	New York	Col. Rufus Ingalls, assistant quartermaster-general.	\$65 per day.	2,470 00	2,470 00
George H. Dentz Favorite	do	(*)	June 14, 1881	June 14, 1881	June 30, 1881	do	do	\$65 per day	1,105 00	1,105 00
	Sloop	6.50	July 1, 1877	July 1, 1880	June 30, 1881	Fort Adams, R. I.	Capt. C. W. Foster, assistant quartermaster.	\$1 per 1000 lbs	501 81	501 81
Jamestown	Ferry boat	115.6	Apr. 2, 1881	Apr. 2, 1881	June 30, 1881	do	Lieut. John W. Dillenbeck, 1st Artillery.	\$3 per day...	265 50	265 50
Native	Sloop	8	Nov. 15, 1876	July 1, 1880	June 30, 1881	New Orleans, La	Lieut. F. B. Jones, 3d Infantry.	\$25 per mo	300 00	300 00
Nellie	do	6	July 1, 1880	July 1, 1880	June 30, 1881	do	Capt. A. J. McGonnigle, assistant quartermaster.	\$20 per mo	240 00	240 00
Virginia	Steamer	50	July 9, 1880	July 9, 1880	July 9, 1880	Fort Townsend, W. T.	Lieut. C. M. Truitt, 21st Infantry, acting assistant quartermaster.	\$19 per day.	19 00	19 00
Neptune	Tug	(*)	Sept. 11, 1880	Sept. 11, 1880	Sept. 11, 1880	San Francisco, Cal.	Maj. R. N. Batchelder, quartermaster.	\$50 per day	50 00	50 00
Geo. E. Starr	Steamer	472.66	Oct. 5, 1880	Oct. 10, 1880	Oct. 13, 1880	Portland, Oregon	Lieut. Col. C. G. Sawtelle, deputy quartermaster-general.	\$250 per day.	1,000 00	1,000 00
Daisy	do	(*)	Oct. 12, 1880	Oct. 12, 1880	Oct. 18, 1880	Vancouver Bks., W. T.	do	\$75 per day.	525 00	525 00
No Name	Lighter	(*)	Jan. 6, 1881	Jan. 6, 1881	June 30, 1881	Presidio of San Francisco, Cal	Capt. C. F. Humphrey, assistant quartermaster.	\$100 per mo.	583 33	583 33
Wizard	Steamtug	(*)	Feb. 10, 1881	Feb. 10, 1881	Feb. 10, 1881	do	do	\$75 per job	75 00	75 00
F. Y. Batchelor	Steamboat	313	Nov. 4, 1880	Nov. 4, 1880	Dec. 7, 1880		Chief quartermaster Department Dakota.	\$350 per day.	11,550 00	11,550 00
									21,734 64	21,734 64

* Unknown.

Respectfully submitted.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. A.

August 8 and October 14, 1861, and orders of the Quartermaster-General, U. S. A., for the fiscal year ending June 30, 1861.

Number.	Name of company	Value of property sold.	Interest on same to June 30, 1861.	Total expenses, charges, &c., to June 30, 1861.	Total principal, interest, expenses, and charges to June 30, 1861.	Balance of principal unpaid July 1, 1860.	Balance of interest unpaid July 1, 1860.	Expenses, &c., unpaid July 1, 1860.	Total principal, interest, expenses, and charges unpaid July 1, 1860.	Interest and charges for the year ending June 30, 1861.	Total to June 30, 1861.
1	Edgefield and Kentucky	\$114 772 86	\$131,224 72	\$7,145 00	\$253,152 58	\$114,772 86	\$120,008 75	\$6,905 06	\$242,086 09	\$8,978 42	\$251,045 11
2	McMinnville and Manchester	48,508 54	51,618 07	8,175 20	106,301 81	48,508 54	48,219 23	7,550 72	102,278 48	3,945 10	106,273 58
3	Mobile and Ohio	505,143 70	121,957 55	4,738 95	631,840 20	60,848 69	23,604 38	4,734 95	82,186 02	4,441 98	96,629 05
4	Memphis, Clarksville and Louisville	338,932 36	384,410 35	7,245 00	728,587 71	338,932 36	283,808 93	1,637 24	632,378 53	25,196 04	657,574 57
Total		1,003,357 46	638,220 69	27,304 15	1,710,882 30	559,062 45	489,021 28	20,227 99	1,068,911 72	42,611 49	1,111,523 21

Number.	Name of company.	Increase of the debt during the year ending June 30, 1861.	Decrease of the debt during the year ending June 30, 1861.	Payments to June 30, 1860.	Payments made during the year ending June 30, 1861.	Total payments made to June 30, 1861.	Principal unpaid July 1, 1861.	Interest unpaid July 1, 1861.	Expenses and charges unpaid July 1, 1861.	Total principal, interest, expenses, and charges unpaid July 1, 1861.	Date when due, paid, or compromised.
1	Edgefield and Kentucky	\$8,848 01	\$1,055 77	\$2,107 47	\$30 41	\$2,137 88	\$114,772 86	\$129,367 17	\$6,874 67	\$251,014 70	Due April 30, 1871.
2	McMinnville and Manchester	.....	.....	28 23	5,050 87	5,079 10	48,508 54	51,614 32	8,099 85	101,222 71	Due July 1, 1869. Sult
3	Mobile and Ohio	4,441 93	.....	585,210 25	.....	535,210 25	60,848 69	31,046 31	4 734 95	96,629 95	pending.
4	Memphis, Clarksville and Louisville.	26,188 66	.....	71,018 14	7 38	71,020 52	338,932 36	318,404 97	2,229 66	657,567 19	Due July 31 1871.
Total		39,578 60	1,055 77	608,359 09	5,088 60	613,447 75	559,062 45	530,432 77	15,939 29	1,106,424 56	Due October 31, 1869.

The indebtedness of the following-named railroad companies has been paid in full, compromised and settled under the acts of March 3, 1871, February 27, 1875, and March 3, 1877, or dropped from the list of indebted railroad companies because they are insolvent:

Number.	Name of company.	Value of property sold.	Interest on same to June 30, 1881.	Total expenses, charges, &c., to June 30, 1881.	Total principal, interest, expenses, and charges to June 30, 1881.	Decrease of the debt during the year ending June 30, 1881.	Payments to June 30, 1880.	Payments made during the year ending June 30, 1881.	Total payments made to June 30, 1881.	Total principal, interest, and expenses, and charges unpaid July 1, 1881.	Date when due, paid, or compromised.
1	Richmond, Fredericksburg and Potomac.	\$7,449 27	.....	.....	\$7,449 27	.....	.....	.....	\$7,449 27	.....	Debt discharged January 1, 1866.
2	Georgia Railroad and Banking Company.	11,935 05	.....	.....	11,935 05	.....	.....	.....	11,935 05	.....	Debt discharged January 12, 1866.
3	Southwestern	46,159 89	.....	.....	46,159 89	.....	.....	.....	46,159 89	.....	Debt discharged May 4, 1866.
4	Maven and Western	83,638 15	.....	.....	83,638 15	.....	.....	.....	83,638 15	.....	Debt discharged November 24, 1866.
5	South Carolina	23,458 50	\$1,640 76	.....	25,105 26	.....	.....	.....	25,105 26	.....	Debt discharged January 21, 1867.
6	Mascogee	5,244 20	424 57	.....	5,668 77	.....	.....	.....	5,668 77	.....	Debt discharged March 15, 1867.
7	Petersburg	65,000 00	3,683 60	.....	68,683 60	.....	.....	.....	68,683 60	.....	Debt discharged August 26, 1867.
8	Memphis and Charleston	547,494 09	30,840 64	.....	578,334 73	.....	.....	.....	578,334 73	.....	Debt discharged October 16, 1867.
9	Mobile and Great Northern	14,637 73	1,192 55	.....	15,830 28	.....	.....	.....	15,830 28	.....	Debt discharged October 31, 1867.
10	New Orleans, Jackson and Great Northern	200,865 58	15,656 91	.....	216,522 49	.....	.....	.....	216,522 49	.....	Debt discharged February 27, 1868.
11	Mississippi Central	78,460 00	6,368 56	.....	84,828 56	.....	.....	.....	84,828 56	.....	Debt discharged April 11, 1868.
12	Virginia and Tennessee	102,880 00	14,371 05	.....	117,251 05	.....	.....	.....	117,251 05	.....	Debt discharged April 16, 1868.
13	Montgomery and West Point	38,559 06	3,324 93	.....	41,884 59	.....	.....	.....	41,884 59	.....	Debt discharged July 16, 1868.
14	Virginia Central	70,000 00	10,364 66	.....	80,364 66	.....	.....	.....	80,364 66	.....	Debt discharged July 21, 1868.
15	Rome	22,086 05	1,778 57	.....	23,864 62	.....	.....	.....	23,864 62	.....	Debt discharged August 10, 1868.
16	Western and Atlantic	472,944 66	70,194 71	.....	543,139 37	.....	.....	.....	543,139 37	.....	Debt discharged August 27, 1868. New settlement made under act of March 3, 1877, and \$199,038.58 refunded to State of Georgia April 28, 1877.
17	Orange and Alexandria	118,895 74	12,497 44	.....	131,393 18	.....	.....	.....	131,393 18	.....	Debt discharged October 8, 1868.
18	Manassas Gap	4,623 51	364 87	.....	5,438 38	.....	.....	.....	5,438 38	.....	Debt discharged October 8, 1868.
19	Wilmington and Weldon	81,500 00	9,946 81	.....	91,446 81	.....	.....	.....	91,446 81	.....	Debt discharged November 4, 1868.
20	Alabama and Florida	51,912 00	6,365 18	.....	58,277 18	.....	.....	.....	58,277 18	.....	Debt discharged May 31, 1869.
21	New Orleans, Opelousas and Great Western	118,772 45	11,947 83	.....	126,720 60	.....	.....	.....	126,720 60	.....	Debt discharged August 21, 1869.
22	Norfolk and Petersburg	2,112 06	.....	.....	2,112 06	.....	.....	.....	2,112 06	.....	Debt discharged January 11, 1870.
23	Western North Carolina	14,269 82	2,084 08	49 00	16,401 90	.....	.....	.....	16,401 90	.....	Debt discharged June 6, 1870.
24	Atlantic and North Carolina	51,453 93	11,040 15	.....	62,494 08	.....	.....	.....	62,494 08	.....	Debt discharged July 31, 1870.
25	Macon and Brunswick	26,820 00	4,861 44	61 80	31,743 24	.....	.....	.....	31,743 24	.....	Debt discharged January 25, 1871.
26	Selma and Milledgeville	148,327 92	20,936 78	668 00	170,932 71	.....	.....	.....	170,932 71	.....	Debt discharged June 13, 1871.
27	San Antonio and Mexican Gulf	46,775 16	17,642 46	4 85	64,422 47	.....	.....	.....	64,422 47	.....	Debt discharged June 14, 1871.
28	Washington, Alexandria and Annapolis	46,864 00	46,864 00	46,864 00	Debt discharged August 10, 1871.

31	Pacific Railroad of Missouri	125, 433 65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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I certify the above statement to be correct.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. A., in charge of Railroad Indebtedness.

J. G. CHANDLER,

Deputy Quartermaster-General, U. S. A., in charge of Railroad Indebtedness.

K.

[General Orders No. 40.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT GENERAL'S OFFICE,
Washington, May 22, 1880.

The following revision of General Orders Nos. 10 and 72 of 1879, relative to contracts, under instructions of the Secretary of War, is, by his direction, published for the information and guidance of all concerned:

1.—PURCHASES AND CONTRACTS FOR MILITARY SUPPLIES AND SERVICES.

1. The supply of the Army and the direction of the expenditures of the appropriations for its support are, by law, committed to the Secretary of War. He exercises control through the several bureaus of the War Department and the several branches of the military service, and the officers thereof. He determines where particular supplies shall be purchased or contracted for, where they shall be delivered, inspected, stored, and how distributed, whether at general depots, for the use of the whole Army, or at particular posts or headquarters for parts thereof. He decides, also, through and by means of what officers, within the laws, these purchases and contracts shall be made.

All officers of the staff who are assigned to the command of a general or other officer remain under that officer's military command, and are subject to his supervision, control, and command in all their official acts relating to matters within his command, and to all matters, acts, and things not specially excepted from his command and control under the law and by the Secretary of War, in accordance with the Regulations and General Orders published by the War Department, or issued by the Secretary of War from time to time.

2. All commanding officers will see to the prompt rendering of returns, early requisitions and estimates from their respective commands, in order to provide for the making of timely contracts for necessary supplies or services.

3. The chief of each branch of the staff of any command is to carefully supervise all estimates and requisitions for supplies for his department, with special reference to the cheapest market and most economical routes of transportation. Such officers should receive from their commanders timely instructions as to all contemplated movements of troops, and as to any probable increase or diminution of force at any particular post, with a view to the proper and economical distribution of the supplies.

4. Contracts will not be made at posts unless specially ordered, and will not be so ordered unless the stores required can be procured at such posts as economically as if sent from other markets or from depots; and all such contracts shall be made out in the name of and signed by the chief officer of that branch of the staff of the command to which they pertain.

5. Proposals for supplies received at posts will, after having been carefully examined, indorsed, and abstracted, be submitted by the officers receiving them, with their recommendations as to the proper bidder to whom the contract should be awarded, to the post commander, who will indorse thereon his recommendations in the case and forward them to next superior headquarters. At the department headquarters they, with all other proposals relating to the contract, will be examined by the officer of that branch of the staff to which they pertain, who, under the general supervision of his commander, will make the award and execute the contract, unless it be one of those which should first be submitted to division headquarters or to the War Department.

When proposals are received at the headquarters of a department for supplies for the general service of the department, the chief officer of that branch of the staff to which they pertain will submit them to the department commander, and, under his supervision, will make the award and contract, unless the contract be one of those which should first be submitted to division headquarters or to the War Department.

All the papers relating to any contract are finally to be transmitted to the bureau of the War Department to which they pertain.

6. At every post, when practicable, fuel and hay shall be procured by the labor of the troops, and the department commander shall designate the posts for which, when this cannot be done, contracts may be made.

7. The labor of troops or government employes, or public means of transportation, shall not be used to enable contractors to fulfill contracts, unless in case of manifest necessity, when it shall be done only on the written authority of the post or superior commander, and full deduction shall be made for such service.

8. In cases where supplies or service of a general character are required, as for stores to be delivered at general depots, or for the regular routes of transportation

the Mississippi River, the advertising for proposals and awarding of contracts made in accordance with the prescribed forms and by the officers to whom they from time to time be committed by the Secretary of War.

contracts shall be in quintuplicate: one copy for the contractor, one for the proper officer or inspector who receives the supplies, one for the proper Comptroller of the Treasury, one for the head of the bureau of the War Department to which the contract pertains, and one for the Returns Office, Department of the Interior; the copy of contract to be accompanied by the following, viz: A copy of the advertisement inviting proposals, one copy of all bids, offers, and proposals received under the affidavit prescribed in section 3745, Revised Statutes. Upon receipt of the papers at the proper bureau of the War Department they will be critically examined with reference to the laws, regulations, and orders by which they are affected, found correct, approval of the proper officer will be written thereon.

If objection appear, all the papers will be submitted to the Secretary of War for his action as he may take thereon.

When the public exigencies do not require the immediate delivery of supplies, the immediate furnishing of transportation or other services, advertisements shall be published for a reasonable time to allow persons at a distance to compete; and a time, to be set forth in the advertisement, will be given the successful bidder to deliver or to furnish the supplies, transportation, or services after the award. In all written contracts, with suitable bonds, will be made in all cases when time and circumstances allow.

When an exigency demands that purchases in open market be made, the proper officer will, if time permit, notify the principal dealers in the articles needed to be within his reach, and will request them to submit written sealed proposals for the sale of the supplies required. This notice may be given by hand-bills posted in public places, by circular letters addressed to the principal dealers, or by both these methods combined.

If time does not permit even this course to be pursued, purchases may be made in the manner which is usual among business men. All written proposals received for purchases are made in open market will be forwarded in the proper manner to the head of the Bureau of the War Department to which the supplies purchased pertain.

Every contract shall be made, as nearly as each will allow, according to the form prescribed, departing therefrom only so far as requisite to meet necessities of the public service. All conditions of a contract shall be stated therein as fully and clearly as practicable.

Slight informalities on the part of the bidder, in complying strictly with the terms of the advertisement, should not necessarily lead to the rejection of the bid made but the interests of the government should be fully considered in the final award of the contract.

II.—ADVERTISING AND JOB PRINTING.

—The term “advertising,” as used herein, includes all publications in newspapers inserted for pay. The words “job printing” cover all kinds of printing except advertisements inserted in newspapers. All communications relative to advertising and printing will be directed to the chief clerk of the War Department.

Section 3828 of the Revised Statutes, relative to advertising, is as follows:

Be it further enacted, That no advertisement, notice, or proposal for any execution of the government, or for any bureau thereof, or for any office thereconnected, shall be published in any newspaper whatever, except in pursuance of written authority for such publication from the head of such department; and no money for such advertising or publication shall be paid, unless there be presented with it a copy of the written authority aforesaid.”

The law requires advertising (section 3709, Revised Statutes) for all purchases and contracts for supplies or services, except personal services, and also except in cases where a public exigency requires immediate delivery or performance. But the law confines advertising solely to newspapers, and the Secretary of War is of opinion that invitations to the public to bid given by hand-bills posted in public places are not advertising within the meaning of the law as insertion of notices in newspapers.

Advertising, whether in newspapers or by hand-bills, contemplates public notice, and under the law, is to be followed by an opening of bids at which all competitors have the right to be present.

Advertising in newspapers is to be used when there is sufficient time; but when such advertising is ordered it must come under the rules growing out of section 3828, Revised Statutes.

In cases where there has not been public notice and an opening of bids, as provided in section 3710 of the Revised Statutes, the officer making the purchase must

transmit with the contract or account a statement to the effect that a public exigency required immediate delivery.

Advertisements, whether by newspaper or hand-bills, will ordinarily be published by the officer who is to make the contract upon the proposals received—in special cases, if competent authority so directs, by any other proper officer; and when issued shall be promptly forwarded by him through the proper bureau to the chief clerk of the War Department, with a copy of any specifications or instructions to bidders, or blanks for proposals, therein referred to.

ADVERTISING.

1. Whenever any officer of the War Department, or any bureau thereof, or of the Army, or any board of officers, or court-martial, shall deem it necessary or advisable to advertise in any newspaper or newspapers (the design being that the advertising shall be paid for by the government), he or they will cause a copy of the proposed advertisement to be made and forwarded directly, through the head of his or their bureau, to the chief clerk of the War Department, for the action of the Secretary of War, with a letter requesting authority to publish the same, and stating in what paper or papers among those on the official list of the department the advertisement should, in his or their judgment, be inserted, and for what length of time.

If the officer or officers consider that the interests of the government require the publication of an advertisement in any locality where there is no official newspaper, or in any newspaper not on the official list, the application should set forth that fact.

2. The following form of application for authority to advertise will be observed:

OFFICE OF _____,
_____,
_____, 18—.

SIR: I inclose herewith a copy of an advertisement dated _____, 18—, inviting proposals for _____, and respectfully request authority to publish the same in the following-named official newspapers:

_____ insertions in _____.

_____ insertions in _____.

Very respectfully, your obedient servant,

[Here sign officially.]

To the CHIEF CLERK,
War Department, Washington, D. C.
(Through _____.)

Heads of bureaus will transmit these applications to the chief clerk of the War Department, with their recommendations indorsed thereon.

3. Officers in advertising sales of property, or for proposals for contracts, or for proposals for supplies, will, as a general rule, allow *thirty days* to intervene between the date of the *first publication* of the advertisement and the *date designated in such advertisement* for the sale to take place or for the opening of bids; but a shorter period than thirty days may be designated if the interests of the service, as reported by the officer advertising, should render it advisable.

As a general rule, authority will be given for six consecutive insertions in a daily newspaper, or four consecutive insertions in a weekly newspaper; but authority will not be given to publish the same advertisement in all the authorized newspapers of any locality, unless the interests of the government seem to require it.

In cases of emergency, application may be made and authority granted by telegraph to publish an advertisement, in which case the date and nature of such advertisement only need be stated. The officer so authorized should immediately transmit to the chief clerk of the War Department twelve printed slips of such advertisement, and report the name of the newspapers ordered to publish the same, with number of insertions in each.

4. Officers of the Army are required to practice all possible economy in advertising consistent with the necessities of the service, and to avoid all superfluous words in the descriptions of supplies and property in advertisements, and in the *headings and titles* attached thereto; and they are especially cautioned not to prepare their advertisements, or send copies of them to newspapers, arranged in such a manner as would lead to a violation of so much of paragraph 12 as relates to displayed or headed advertisements, &c.

At principal offices and depots where advertisements inviting proposals are frequently issued, it is not necessary to publish in detail each time the usual conditions imposed on bidders and contractors. A reference to former advertisements of same conditions, or a notice that they will be furnished on application, will be sufficient.

FORMS OF ADVERTISEMENTS.

following examples illustrating the brief forms of advertisements to be used on for the information and instruction of officers, and should be followed as far as practicable.

[Form of advertisement for various supplies needed at various posts.]

PROPOSALS FOR MILITARY SUPPLIES.

HEADQUARTERS DEPARTMENT OF ———,
OFFICE OF CHIEF QUARTERMASTER,
————, 18—.

and proposals, in triplicate, subject to the usual conditions, will be received at this office, or at the offices of the quartermasters at the following-named posts, until 12 o'clock noon on ———, 18—, at which time and places they will be opened in presence of bidders, for furnishing and delivery of military supplies during the ———, commencing ———, 18—, and ending ———, 18—, as follows: [Here state articles, but not quantities,] or such of said supplies as may be required, at ——— [here state posts or places.]

Proposals for either class of the stores mentioned, or for quantities less than the quantities required, will be received.

The government reserves the right to reject any or all proposals.

Preference will be given to articles of domestic production.

Blank proposals and printed circulars stating the kind and estimated quantities needed at each post, and giving full instructions as to the manner of bidding, conditions to be observed by bidders, and terms of contract and payment, will be furnished on application to this office or to the quartermasters at the various posts named.

Envelopes containing proposals should be marked "Proposals for ——— at ———," and addressed to the undersigned, or to the respective post quartermasters.

———— Quartermaster ———, U. S. A.

NOTE.—In advertisements by the Quartermaster's Department for military supplies, the provisions of section 3716, Revised Statutes, are to be stated.

[Form of advertisement for delivery at one post of a certain article or articles.]

PROPOSALS FOR ———.

HEADQUARTERS DEPARTMENT OF ———,
OFFICE OF CHIEF QUARTERMASTER,
————, 18—.

and proposals, in triplicate, subject to the usual conditions, will be received at this office, or at the office of the quartermaster at ———, until 12 o'clock noon on ———, at which time and places they will be opened in presence of bidders for furnishing and delivery at ——— [here state article and quantity].

Proposals for a less quantity will be received.

The government reserves the right to reject any or all proposals.

Preference will be given to articles of domestic production.

Blank proposals, and full information as to the manner of bidding, conditions to be observed by bidders, and terms of contract and payment, will be furnished on application to this office or to the quartermaster at the post.

Envelopes containing proposals should be marked "Proposals for ——— at ———," and addressed to the undersigned, or to the quartermaster at the post.

———— Quartermaster ———, U. S. A.

NOTE.—If a number of articles are needed involving lengthy publications in describing the articles and specification of quantity, then follow general plan indicated in this form of having circulars printed.

In advertisements by the Quartermaster's Department for military supplies, the provisions of section 3716, Revised Statutes, are to be stated.

[Form of advertisement for proposals for Army transportation.]

PROPOSALS FOR ARMY TRANSPORTATION.

HEADQUARTERS DEPARTMENT OF ———,
OFFICE OF CHIEF QUARTERMASTER,
————, 18—.

and proposals, in triplicate, subject to the usual conditions, will be received at this office until 12 o'clock noon on ———, 18—, at which time and place they will be opened

in the presence of bidders, for the transportation of military supplies on the following-described routes in the Department of ———, during the ——— commencing ——— and ending ——— [here state the kind of transportation required, whether rail, wagon, or water, and give a brief description of the route].

Proposals for transportation on any or all of the routes above named will be received. The government reserves the right to reject any or all proposals.

Blank proposals, form of contract, and printed circulars stating the estimated quantities of supplies to be transported, and giving full information as to the manner of bidding, conditions to be observed by bidders, and terms of contract and payment, will be furnished on application to this office or to the offices of ——— [here state places at which such information can be obtained].

Envelopes containing proposals should be marked "Proposals for transportation on route ———," and addressed to the undersigned.

—————, *Quartermaster* ———, U. S. A.

NOTE.—All advertisements are to be signed officially.

5. All bids for advertising must be submitted to the Secretary of War for approval prior to being paid. The officer who issued the advertisement will cause publishers to furnish him with their bills in duplicate and with copies of their papers containing the advertisement. After satisfying himself that the advertisement has been inserted for the time charged, he will have the bills made out and certified upon the official form, with the nature of the advertisement definitely described, and with a copy of it, cut from the newspaper named in the bill, attached to the account. A copy of the letter from the War Department authorizing the advertising to be done must be indorsed on the account. The accounts for advertising thus prepared, together with the original bills rendered by the publishers, will be forwarded by the certifying officer directly to the chief clerk of the War Department for audit, with a letter of transmittal describing the inclosures.

6. No voucher must contain the account of more than one newspaper, nor of more than *one* advertisement.

7. The following is the official form for accounts for advertising :

The United States, to ——— ———, Dr.

To insertion of annexed advertisement of ——— in the ———, published at ———, ———, as follows :

Nature of advertisement.	Date of first insertion.	No. of squares or lines.	No. of inser-tions charged.	No. of inser-tions ordered.	Amount charged.		Amount allowed.	
					Dolla.	Cts.	Dolla.	Cts.
[Attach copy of advertisement cut from the newspaper.]								
Total								

The rate charged per square (of ——— lines each) is as follows: For the first inser-tion, ——— dollars and ——— cents; for each subsequent insertion, ——— dollars and ——— cents.

I certify that the annexed advertisement was cut from the newspaper named in the above account, and that it was inserted in that newspaper for the period stated; also that the regulations of the War Department relative to advertising and job printing, dated ———, 18—, have in this case been complied with.

[Here sign officially.]

Signed in duplicate at ———,
this ——— day of ———, 18—.

8. Advertisements and job printing *must not* be submitted for audit in the same let-ter of transmittal.

9. Officers are prohibited from making any alterations in the number of squares or

the number of insertions, or the amount charged. They will state in the proper column the number of insertions ordered, and leave blank the column headed "Amount paid."

Accounts may, in some cases, be presented to officers for advertisements which were not ordered published in the newspaper charging for the same, but which may have been ordered to be inserted therein by the Secretary of War; these, also, are to be submitted to the War Department for decision. They will be made out upon the official forms the same as other advertisements, and in like manner transmitted to the clerk of the War Department. The following form of certificate will be used in such cases:

"I certify that the annexed advertisement was cut from the newspaper named in the above account, and that it was inserted in that newspaper for the period stated."

In the event of the death, removal, or resignation of any officer, or of his being transferred to another station, the outstanding bills for advertisements of his office shall be prepared, certified, and forwarded by his successor, who is authorized to vary them to correspond with the facts. Officers changing stations will leave with their successors complete records relative to unsettled accounts for advertising and printing.

Publishers of official newspapers are notified that claims for advertisements copied from other papers, without authority from the Secretary of War, will not be paid; nor will any allowance be made for *displayed* advertisements, nor for *leading*. Advertisements must be *set up close*, and in no larger type than is ordinarily used in setting other advertisements. It is required of publishers that they forward to the chief clerk of the War Department, for file, a schedule of their commercial rates charged to individuals, with their usual discounts, sworn to as required by law, such schedule to name the size of type used in advertisements, and show whether the charge is made by the "line" or by the "square," and if by the square the number of lines counted as such; also the rate per line or square for the first and subsequent insertions. And when the charges are varied in consideration of the large amount of space occupied by the advertisement, or the long period of publication, the publisher should furnish a plain schedule of prices showing the charges from one square inserted one time up to thirty times, to any number of squares which may be contained in the advertisement inserted one time up to thirty times. Whenever any change is made in the advertising rates of a paper, notice of the change should be immediately sent to the clerk of the War Department.

The heads of the several bureaus of the War Department will furnish to all officers charged with the publication of advertisements complete lists of newspapers designated by the Secretary of War, together with the regulations and orders of the War Department upon the subject, and all necessary blanks for compliance with these regulations.

Officers are informed that the publication of military orders and circulars in newspapers is unauthorized. Paragraph 1134 of the Army Regulations does not authorize the insertion of military orders in newspapers.

JOB PRINTING.

Officers are informed that, as a general rule, all regular blanks, books, printed forms, &c., are executed at the Government Printing Office, at Washington, and it is the duty to obtain them by requisitions upon the Adjutant-General or the heads of the respective corps when practicable; but the commander of an army, department or division, whenever in his judgment it may be conducive to the public interest, may, in addition to the orders printed under the provisions of paragraph 1134, Army Regulations, order all forms of printing and advertising for supplies or services, except advertisements to be published in newspapers, which latter the law requires shall first have the written authority of the Secretary of War. The bills must first be presented to the officer ordering the work, who will cause them to be made out and certified upon the official forms in use for that purpose, the certificate to state the necessity and quantity of the work. A sample of the printing must accompany each bill. The number of copies must also be stated. When the charge is for book or pamphlet printing containing more than four pages, the amount of matter (number of thousand "ems"), number of "tokens" of press-work, and the rate per thousand "ems" and per "token" must be stated. Vouchers must show the place where, and the date when, the work was executed, and the printing be so described as to class, amount, and rates that the quotations can be readily reviewed according to the customary methods in use among book and job printers. Where the paper is furnished by the printer, the fact shall be stated in the voucher, and the number of quires or reams used, and the price charged per quire or ream. Unless so stated, it will be presumed that the paper was furnished by the government, and the bills audited accordingly.

Bills for printing done under the authority of the above paragraph must be

submitted to the War Department, prior to payment, in the same manner as accounts for newspaper advertising.

17. Orders authorizing advertising or printing to be done will not be construed as authorizing payment of the bills until audited and approved according to these Regulations.

III.—PROPOSALS.

Information in regard to supplies or services for which proposals have been invited by advertisement will be furnished to all persons desiring it, on application to such sources as are designated in the advertisement.

In case of supplies, they will be informed of the kind, quantity, and quality of articles required; place, time, and rate of delivery; conditions of payment; furnished with such specifications as have been adopted, and permitted to examine the standard samples at the places where they are deposited.

In case of services, they will be informed of the nature and extent of the services required; the place where or places between which they are to be performed, and the time allowed for the performance; furnished with or allowed to examine plans and specifications of all buildings, constructions, and other works in contemplation, and generally furnished with information to aid them to bid understandingly.

No bidder will be informed, directly or indirectly, of the name of any person intending to bid or not to bid, or to whom information in respect to proposals may have been given.

Proposals should be prepared in strict accordance with the requirements made known in the advertisement, or circular of instructions to bidders; and copies of such advertisement, circular, or letter should be attached to the proposal and form part of it, and plans or specifications with which the bidder may have been furnished be referred to in the proposal.

Numbers and prices should be written out in words as well as expressed in figures; but when a great variety of articles is required, as in case of stationery, hardware, &c., quantities and prices may, if the amounts involved are inconsiderable, and the forms of proposals so indicate, be expressed in figures only.

Specifications need not be written out in the body of a proposal. Their attachment to the proposal or the declaration that they form part of it will be sufficient.

Alterations by erasures or interlineations should be explained or noted in the proposal over the signature of the bidder.

Proposals are to be prepared without assistance from any person belonging to, or employed in, the military service of the United States. They should be made in duplicate (or in triplicate, as may be required), upon the forms and in the manner designated in the advertisement.

Proposals should be signed by the bidder submitting them with his usual signature in full.

When a firm is a bidder, the member of the firm or agent who signs the firm-name to the proposal should state, in addition, the names of all the individuals composing the firm.

Any one signing a proposal as the agent of another or of others must file with it legal evidence of his authority so to do.

The place of residence of every bidder, with post-office address, county and State, District or Territory, should be given after his signature.

When no bond is required, bidders must, if called upon by the awarding officer, furnish satisfactory evidence, before the award is made, of their ability to furnish the supplies, or perform the work, for which they bid.

All proposals should be inclosed in suitable envelopes, securely sealed, indorsed, and addressed as required by the advertisement, and be delivered to or received by the officer to whom addressed before the time appointed for the opening; and no responsibility shall attach to that officer for the premature opening of any proposal not so indorsed as to show that it is a proposal, and the particular purpose for which it is made.

When an advertisement calls for proposals to deliver supplies or render services at more than one place, a separate proposal should be made for each place, but all may be submitted in the same envelope.

All proposals received prior to the time of opening will be securely kept, so that they cannot be tampered with.

The officer whose duty it is to open proposals will decide when the time fixed upon for the opening has arrived, and no proposal for that opening will thereafter be received as formal.

If a bidder wishes to withdraw his proposal he may do so before the time fixed for the opening, without prejudice to himself, by communicating his purpose, in writing, to the officer who holds it; and when his proposal is reached it shall be handed to him, or his authorized agent, unread.

Proposals will be opened and read aloud at the time and place appointed for the

;; and a record of each proposal shall then and there be made upon an abstract fully all its essential particulars.

time does not permit formal advertisement in the newspapers, a copy of every which an officer may distribute calling for proposals or offers will be forwarded on of its date to the bureau or department to which it pertains. It will be in a letter of transmittal, giving fully all information that may be necessary plete understanding of the necessity for the proposed purchase.

on as the proposals have been opened and decided upon, an "Abstract" of ill be made, one copy of which, together with one of the duplicates of each l offered, will be fowarded to the proper bureau without delay.

'Abstract of Proposals" will have a copy of the notice attached, and will have e columns for "No. of proposal," "Name of bidders," "Date of delivery," rks," and two columns (one for quantity and one for price) for each article, var- article or package that may be offered; for example, under the item of pork ill be two columns (price and quantity) for each of the varieties, "Mess," mess," "Thin mess"; under coffee two for each of the items, "Green, in barrels," , in bags," "Roasted, in bags," &c.

i the number of proposals received is large, separate abstracts may be made for ticle or class of articles.

accepted quantity and price will be noted in the column of "Remarks," oppo- name of the bidder. If a bid is rejected, another at a higher price for the same being accepted, the reason for the rejection will be clearly indorsed on the bid nd the word "Rejected" will be written in the column of "Remarks" oppo- entry.

l written contracts are made it will be so stated on the abstract.

'abstract" must have entered on it every proposal presented.

proposals will be neatly folded and numbered, in the same manner as for any bstract, and will be indorsed as follows :

No.....
PROPOSAL OF
.....
Opened, 18—.
ARTICLES BID FOR.

osals must not be fastened together, nor will they or any other paper be fastened racts, except to the copy required to be sent to the "Returns office."

ld the exigencies of the service demand that a purchase be made in the open without advertisement, the fact will be reported to the proper bureau, with a l statement of the quantity, quality, and price of each article so purchased, ies of the sellers, and the circumstances which rendered such a course neces-

ouchers for purchases must have expressed on their face (immediately below the nt of article, quantity, and price) the mode of purchase, using therefor that of owing phrases which applies to the particular case :

ler written contract, dated ———, 18—."

ler public notice and sealed proposals, opened ———, 18—."

urchase in open market ———, 18—."

aking written contracts officers must follow, as nearly as practicable, the forms i the Regulations, and must see that all the conditions are fully and definitely ed.

purchases are made under public notice and proposals without executing formal contracts, the officer will give to the successful bidder a written notification of ptance of his bid. These notifications should expressly state the name of the quantity, quality, price, kind of package, and time and place of delivery.

FORM OF PROPOSAL.

Proposal for ———.

—————, 18—.

—————,

—————:

In accordance with your advertisement of ———, 18—, inviting proposals for and subject to all the conditions and requirements thereof, and of your [cir-

cular or letter] dated ———, 18—, copies of both of which are hereto attached, and so far as they relate to this proposal, are made a part of it [we or I], propose to furnish [here specify, in proper detail, the kinds and quantities of supplies, or materials, or the nature and extent of services which the bidder proposes to furnish]. [We or I] make this proposal with a full knowledge of the kind, quantity, and quality of the articles [or nature and extent of the services] required, and, if it is accepted, will, after receiving written notice of such acceptance, enter into contract within the time designated in the advertisement, with good and sufficient sureties for the faithful performance thereof.

Signature, _____,
Address, _____,
Signature, _____,
Address, _____.

(Signed in duplicate, or in triplicate, as the case may require.)

FORM OF PROPOSAL (General).

Place of business _____,
Date _____

The undersigned, engaged in the _____ business, in response to your _____ of the _____ day of _____, hereby offer for sale to the _____ Department of the United States Army the following stores, viz: _____ dollars and _____ cents (\$_____) per _____, and should this proposal be accepted _____ hereby bind _____ to deliver the stores in strict compliance with terms of your _____, on or before the _____.

(Signature.) _____

To _____,
_____, U. S. A.

On the above proposal is accepted the following: _____.
Office United States Commissary Subsistence, Louisville, Ky. _____, C.

- NOTES.—1. Proposals for different articles should generally be on separate sheets.
2. State the price in figures in the (\$ _____), and also write out in words in space left for the purpose.
3. State whether the proposal is made under "advertisement" or "written notice" in the spaces left for the purpose, and insert date of notice or advertisement.
4. Inclose this sheet in an envelope, address to the officer inviting proposals, and endorsed "Proposals for stores."
5. Proposals *must* be in duplicate.
6. Proposals *must* state when the articles will be ready for delivery.
7. The prices bid must include the cost of package and delivery.

(FORM 55.)

*Abstract of proposals for ——— stores, opened at ———, on the ——— day of ———
by ———, C. S., U. S. Army.*

BONDS TO ACCOMPANY PROPOSALS.

Bonds to accompany proposals, pursuant to the act of April 10, 1878, shall be in such cases and with such penalties as shall be designated by the Secretary

In all cases where bonds are required from bidders no proposals will be co unless accompanied by a bond made according to the form prescribed.

The condition of the bidder's bond shall be to the effect that the bidder will n draw his proposal within sixty days succeeding the date announced in the a ment or notice for the opening of proposals; and that, if his proposal be acce the contract for which he has bid be awarded him, he will enter into a cont bond agreeably to the terms of his proposal within such number of days after on which he is notified of such acceptance and award as may be designate officer representing the United States. (See Act of April 10, 1878.)

The form of the bidder's bond shall be as follows:

BIDDER'S BOND.

Know all men by these presents, that we [name of obligor], of [residence of giving town, county, State, etc.], as principal, and [name of surety], of [resi surety], and [name of surety], of [residence of surety], as sureties, are held a unto the United States of America in the penal sum of ——— dollars, to the of which sum, well and truly to be made, we do bind ourselves, our heirs, ei and administrators, jointly and severally, firmly by these presents.

Given under our hand and seals this ——— day of ———, 18—.

The condition of this obligation is such that whereas the above-bonnden [obligor], in response to a public advertisement and notice dated ———, 18—, a and published by ———, United States Army, has made and presented to ——— States Army, a formal proposal, in writing, whereby he has proposed and enter into a contract with ———, United States Army, acting for and repres said United States, to [here state in brief the subject of the contract], accordi terms and conditions set forth in said advertisement and notice:

Now, therefore, if the said [name of obligor], shall make and shall not with said proposal within sixty days from the date of opening the proposals, and sha ——— days from the date on which he may be notified that his said proposal accepted and the said contract awarded to him (provided such award be mad the sixty days above mentioned), duly and formally enter into such contract a to the terms of his said proposal, and into such bond for its due performanc be required of him, or if his proposal shall not be accepted and such contra awarded him, then this obligation shall be void; otherwise, that is to say, he shall withdraw his proposal within said sixty days, or fail to enter within sa days into such contract if awarded him, and into such bond, to remain in f effect, and virtue.

Witness:

(Executed in duplicate.)

JUSTIFICATION OF THE SURETIES.

STATE OF _____,
County of _____, ss:

I [name of surety], one of the sureties named in the within bond, do swear pecuniarily worth the sum of ——— dollars, over and above all my debts and li
[Signature of s

Before me,

[Signature of officer administering oath, with seal, i

STATE OF _____,
County of _____, ss:

I [name of surety], one of the sureties named in the within bond, do swear pecuniarily worth the sum of ——— dollars, over and above all my debts and li
[Signature of s

Before me,

[Signature of officer administering oath, with seal, i

CERTIFICATE.

I [name of certifying official, with name of his office], do hereby certify that [name of surety] and [name of surety], the sureties above named, are personally known to me, and that, to the best of my knowledge and belief, each is pecuniarily worth, over and above all his debts and liabilities, the sum stated in the accompanying affidavit subscribed by him.

[Signature of certifying official.]

NOTE.—The certificate may be given separately as to each surety, and modified accordingly.

Except in the rare cases, where the United States may elect to exercise its reserved right to reject proposals, contracts will be awarded to the lowest responsible *bona fide* bidder, who, when required, produces a proper article, and whose proposal therefor is not unreasonable in amount.

IV.—CONTRACTS.

FORM OF CONTRACT (GENERAL).

Articles of agreement entered into this _____ day of _____, eighteen hundred and _____, between _____, United States Army, of the first part, and _____, of the county of _____, State of _____, of the second part.

This agreement witnesseth, That the said _____, for and in behalf of the United States of America, and the said _____, for _____, _____ heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows, viz:

[Here give the name of the contractor, and state what he agrees to do by introducing in succession those articles of the agreement which define his duties; such, for instance, as fix the place and date of delivery of the supplies or performance of the services; as give the quantity, quality, and description of the supplies to be furnished, character of their packages, &c., or nature of the service to be rendered; all in such detail as may be requisite. Also here insert those articles which relate to terms of payment; the action to be taken by the United States in case of failure or deficiency on the part of the contractor; and any other conditions which should be embodied in a contract stipulating for the delivery of supplies or for the performance of a service.]

No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add, to any contract made with an incorporated company for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract." See Sec. 3740, Revised Statutes.]

This contract shall be subject to approval of [name the proper officer].

In witness whereof the undersigned have hereunto placed their hands and seals the date first hereinbefore written.

Witnesses:

_____.

(Executed in quintuplicate.)

Approved: _____, 18—.

_____,

Approved: _____, 18—.

_____,

I do solemnly swear that the foregoing is an exact copy of a contract made by me personally with _____; that I made the same fairly, without any benefit or advantage to myself, or allowing any such benefit or advantage corruptly to the said _____, or any other person; and that the papers accompanying include all those relating to the said contract, as required by the statute in such case made and provided.

_____,
_____.

Subscribed and sworn to before me this _____ day of _____, eighteen hundred _____, and _____.

NOTE.—This affidavit is required only on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior.

BONDS TO ACCOMPANY CONTRACTS.

No contract shall be entered into on the part of the United States unless the contractor, upon the execution of the contract or as soon thereafter as practicable, shall furnish a bond according to the form prescribed.

The amount of the penalty of the contractor's bond shall be not less than one-tenth of, nor more than the full sum of, the total consideration of the contract; the amount to be fixed, in each case, by the officer representing the United States.

The form of the contractor's bond shall be as follows:

CONTRACTOR'S BOND.

Know all men by these presents, That we [name of obligor], of [residence of obligor, giving town, county, State, &c.], as principal, and [name of surety], of [residence of surety], and [name of surety], of [residence of surety], as sureties, are held and bound unto the United States of America in the penal sum of _____ dollars, to the payment of which sum, well and truly to be made, we do bind ourselves, our heirs, executors and administrators, jointly and severally, firmly by these presents.

Given under our hands and seals this _____ day of _____, 18—.

The condition of this obligation is such that, Whereas the above-bounden [name of obligor] has, on the _____ day of _____, 18—, entered into a contract with [name and description of officer], for, [here set forth in brief the subject of the contract.]

Now, therefore, if the above-bounden [name of obligor], _____ heirs, executors, and administrators, shall and will, in all respects, duly and fully observe and perform all and singular the covenants, conditions, and agreements in and by the said contract agreed and covenanted by _____ to be observed and performed, and according to the true intent and meaning of the said contract, then the above obligation shall be void and of no effect; otherwise, to remain in full force and virtue.

_____, [L. S.]
_____, [L. S.]
_____, [L. S.]

Witnesses:

_____.

(Executed in duplicate.)

JUSTIFICATION OF THE SURETIES.

STATE OF _____,

County of _____, ss:

I [name of surety], one of the sureties named in the within bond, do swear that I am pecuniarily worth the sum of _____ dollars over and above all my debts and liabilities.

[Signature of surety]

Before me,

[Signature of officer administering oath, with seal, if any]

STATE OF _____,

County of _____, ss:

I [name of surety], one of the sureties named in the within bond, do swear that I am pecuniarily worth the sum of _____ dollars over and above all my debts and liabilities.

[Signature of surety]

Before me,

[Signature of officer administering oath, with seal, if any]

CERTIFICATE.

I [name of certifying official, with nature of his office], do hereby certify that [name of obligor] and [name of surety], the sureties above named, are personally known to me, and that, to the best of my knowledge and belief, each is pecuniarily worth, over and above all his debts and liabilities, the sum stated in the accompanying affidavit subscribed by him.

[Signature of certifying official.]

NOTE.—The certificate may be given separately as to each surety, and modified accordingly.

BOTH SPECIES OF BONDS.

'or contractors' bonds are to be executed by the bidder or contractor as principal and two sufficient and responsible persons as sureties.

Obligor and surety affixes to his signature a formal seal of wax or other adhesive.

Signature of obligor and sureties is attested by at least one witness; when made, by a separate witness to each signature.

Sureties are to make and subscribe affidavits of justification on the back of the bond, in which they jointly justify to be double the amount of the penalty; affidavit to be taken before any official or person authorized by the laws of the State, Territory, or District, to administer oaths.

Justification shall, if practicable, be followed by the certificate of a judge of a State court or United States district attorney, or, in their absence, by some official of the United States, who shall certify that the sureties are known and that, to the best of his knowledge and belief, each is pecuniarily worth, above all his debts and liabilities, the sum stated in his affidavit of justification; if necessary or more convenient, separate certificates may be furnished as surety.

Will not be accepted as a surety, nor will a partner be accepted as surety for or for a firm of which he is a member. (See Revised Statutes, sec. 3722.)

Or of a corporation will not be accepted as surety for such corporation.

Or the sureties to a *bidder's* bond may be accepted as surety or sureties to or of the same person (if his bid be accepted) as contractor, provided such sureties are able duly to justify as required for the second bond.

Bidders' and contractors' bonds are to be executed in duplicate.

V.—QUARTERMASTER'S DEPARTMENT.

Contracts for transportation over routes which are impassable during a portion of the year will generally provide for the transportation of supplies during that period most favorable for the service. The months embracing such period will be stated in the contract. Provision will also be made in contracts for transportation, rates, if necessary, during that period when the service is most difficult to perform in case any public exigency requires it; but the officer requiring performance of such service at higher rate must report his action and the reason therefor to the Quartermaster-General of the Army.

Where practicable, contracts for supplying military posts with fuel, forage, straw, and hay, will provide for delivery, monthly, of the quantities required each month, in order to avoid unnecessary accumulation of property at posts, and to distribute expenditures throughout the year, and to prevent risk of great loss by fire or other causes.

Following is a list of articles of clothing, camp and garrison equipage, which are to be separately marked by contractors, in accordance with section 3731, Revised Statutes: Helmets, uniform dress-caps, campaign hats, forage-caps, great-coats, coats, trousers, shirts, drawers, overalls, stable-frocks, stockings, Berlin gloves, puttees, boots, shoes, buffalo overshoes, arctic overshoes, woollen blankets, ponies' blankets, iron bunks, bed-sacks, pillow-sacks, mosquito-bars, iron pots, kettles, mess-pans, axes, hatchets, spades, shovels, pickaxes, drums, trumpets, cymbals, books, tents, tent-poles, flags, colors—national and regimental, standards, sashes, sash-belts and slings, camp-colors, scrubbing-brushes, and each roll of cloth.

Of the following to be marked: Axe, hatchet, and pickaxe handles, tent-pins, tent-ropes, halliards, buttons, thread, hat and cap trimmings, letters, numbers, paper, petroleum paper, twine, baling-rope, lacing-cord, needles, hooks and eyes, cord, cotton-wadding, black Silesia, bleached muslin, unbleached muslin, flannel, Russia sheeting, black alpaca, brown linen, buckram, canvas-padding, canvas, white jeans, white serge, black Italian cloth.

Of quartermaster's stores to be marked separately will be such as from their character it is advantageous to so distinguish. It being impracticable to describe a complete list all such articles as are to be marked separately or in packaging and judgment of the purchasing officer must be exercised, having regard to the requirements of the law.

Following articles will always be marked separately: Wagons, ambulances, portable forges and bellows, machines, wagon-covers, panelins; wagon, cart, and timber, except spokes, felloes, and other small parts; barrels, casks and kegs, stoves, chairs, desks.

FORM OF CONTRACT FOR WAGON TRANSPORTATION.

This agreement entered into at _____, this _____ day of _____, eighteen hundred _____, between _____, _____ quartermaster _____, United States Army, of _____, _____, and _____, of the county of _____, State of _____, of the second part. _____ do hereby witnesseth, that the said _____, _____ quartermaster _____, for and

in behalf of the United States of America, and the said ———, for ———, ——— heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows, viz:

I. The said ——— shall, during the period commencing on the ——— day of ——— 18—, and ending on the ——— day of ———, 18—, furnish wagon transportation from ——— to ———; back from ——— to ———; from either of said points to any intermediate point; from any one point to any other on the route, or to or from any point located not more than ——— miles from the line of the route or from either of its termini, for all such public stores as may be turned over to the said ———, or ——— agent, in good order and condition for transportation, by the proper officers or agents of the Quartermaster's Department.

II. The said ——— shall have a place of business or agency at ———, and at such other points on the line of the route as may be designated by the said ———. Written notice shall be given the said ———, or ——— agent at ——— place of business or agency nearest the point from which the stores are to be transported, of the quantity and kind of stores to be transported, when and where they will be delivered to ———, and their destination, subject to such changes as may be made while in transit, as follows, viz: For ——— pounds or less, ——— day's notice; for any quantity more than ——— and not exceeding ——— pounds, ——— day's notice; for any quantity more than ——— and not exceeding ——— pounds, ——— day's notice; and for any quantity more than ——— and not exceeding ——— pounds, ——— day's notice. No two of said notices for ——— pounds or less from the same starting-point shall take effect within ——— days of each other; and no two of said notices for over ——— pounds from the same starting-point shall take effect within ——— days of each other. In determining the length of notice to be allowed, the notice from different starting-points shall be considered independently and separately; the said ——— being entitled to the specified allowance of time for moving the particular quantity of stores indicated in the notification, and not to any additional time by adding together notifications from two or more starting-points.

III. Transportation by means of ox-teams is contemplated by this agreement, but when, in the judgment of the forwarding officer, horse or mule teams are required for the expeditious movement of public stores, the said ——— shall furnish such number as may be required, and the written notice calling for them shall be filed with the bill of lading.

IV. When the quantity of stores to be transported is not sufficient for the loading of a train of ——— wagons, and immediate transportation is not requisite, they shall be received by the said ———, or ——— agent, who shall give a shipper's receipt therefor; and such stores may be detained in storehouse, at the expense of the said ———, until enough shall accumulate for the loading of a train of ——— wagons, when they shall be forwarded to destination.

V. When the quantity of stores to be transported weighs less than two thousand pounds and immediate transportation is required by the forwarding officer or agent, the said ——— shall transport them to destination with all possible dispatch, not exceeding ——— days per one hundred miles, without any further notice than may be necessary to enable the said ——— to provide the requisite means of transportation.

VI. All the means of transportation assembled by the said ———, for service under this agreement, shall be submitted to the inspection of the officer or agent of the Quartermaster's Department at the place of departure, and only such shall be used as they and there may be accepted by him.

VII. In addition to the time allowed by the provisions of Article II of this agreement for assembling the wagons required, there shall be allowed to the said ——— for the loading of the train ——— days for every ——— wagons, and in that proportion for any greater or less number of wagons in the train. Any delay beyond such specified time shall be charged to the said ——— at the rate allowed for delay caused by orders, as provided in Article X of this agreement, unless such delay arises from causes beyond the control of the said ———, or ——— agents or employes, and is so determined by a Board of Survey, to be applied for by the said ——— in the manner provided in Article XIV.

VIII. Upon the completion of the loading of the train, bills of lading of that date shall be signed by the said ———, or ——— authorized agent, and the stores so receipted for shall be transported without delay, by the most direct route, to their destination, and there delivered, in good order and condition, to the officer or agent of the Quartermaster's Department authorized to receive them. Such transportation shall be effected within a reasonable time after the completion of the loading of the train as fixed by the date of the bill of lading, not exceeding ——— days per one hundred miles for horse and mule trains required under the provisions of Article III of this agreement, nor ——— days per one hundred miles for all other trains, unless a longer time be authorized in writing by the forwarding officer prior to the commencement of or during the journey (but not after its completion), or unless detained by orders en route, which must be produced.

ever transportation is required in any one train for a quantity of stores — pounds, the said — shall, when necessary, on application to the —, be furnished with a suitable escort for their protection.

the trains of the said — are stopped or delayed at any place (after the train has been completed) any time exceeding — days, either by an officer or authorized agent of the Quartermaster's Department, or of the commanding officer of a post, or of troops present; or when means of transportation on requisition at a stated point are delayed by proper authority to the detriment of stores to be transported, the said — shall be paid, upon the demand of the officer or agent of the government causing the delay, the sum of — cents per diem for each and every one hundred (100) pounds of freight in a train or for which transportation was required if a train be empty, for each day it may be so delayed; but no such payment shall be made when the stoppage or delay of a train or any portion thereof is given because of the necessity of the said — to proceed with said train or any portion thereof by reason of deficiency in the quantity or quality of the means of transportation, or by any accident, or by the action of the said —, or — agents or employes. All orders from officers or agents of the government to halt trains shall be given to the said —, or — agent in writing, setting forth fully the reasons therefor: *Provided*, That the said — shall not be entitled to compensation for any such delay when occasioned by proper military orders for the protection of the trains, but the time so lost shall be allowed in computing the time of the trip.

In case of failure by reason of deficiency in the quantity or quality of the means of transportation furnished, or from any other cause on the part of the said — to meet the demands and requirements made upon — for transportation under this agreement, after due notice shall have been given the said — or —, as provided in Article II and III, then the officer or authorized agent of the Quartermaster's Department charged with the duty of forwarding the stores shall be responsible to supply the deficiency either by purchase, hire, special contract, or the use of government transportation, as the said officer or agent may elect; and the said — shall be required to do so by the said officer or agent; turn over the teams belonging to the said — to the said officer or agent, who shall use them as the necessities of service may require, until the transportation required is completed; and the said — shall be charged for any expense incurred by the government in excess of that herein provided; such amount to be deducted from any moneys due, or to be paid to the said —. In case of the use of government transportation, any cost or expense shall be considered to be — per cent. of the sum which, under the agreement, would be allowed for the service if performed by the said —.

At the arrival of the train at its destination, the receiving officer or agent of the Quartermaster's Department shall examine the stores, and if all are in good order, and are delivered within the proper time, shall indorse the bill of lading.

Upon such indorsement, payment for the transportation shall be made. If the stores are not delivered within the proper time, or are damaged, or are found to be deficient in them, the responsibility for such deficiency, damage, or unauthorized loss shall be determined by a Board of Survey.

The Board of Survey (to be applied for, in writing, by the said —, or — member of which board shall, when practicable, and subsistence stores are being transported, be an officer on duty in the Subsistence Department) shall be called without delay to examine the quantity and condition of the stores transported, investigate the causes of the apparent causes, assess the amount of loss, deficiency, or damage, determine the number of days' delay, and state whether they were attributable to want of care or to neglect on the part of the said —, or — agents or employes, beyond the control of the said — or — control; and these proceedings, a copy of which shall be furnished the said —, shall, after due approval and confirmation, be indorsed on the bill of lading, and shall govern the payments to be made on it. For loss or damage due to shrinkage, and for leakage of vinegar, molasses, or other liquids, the said — shall not be held liable, if the packages are delivered in good order and condition, and the Board of Survey shall be satisfied that such shrinkage or leakage is due from want of proper care or from neglect on the part of the said —, or — masters or agents. For loss, deficiency, or damage, attributable to the said — employes, the said — shall pay twice the cost of the stores lost, damaged, or deficient, at the place where they were turned over to the said —; and the said — shall be allowed on stores lost or deficient. In case of damage, the amount shall be deducted in proportion to the quantity damaged.

The amount found due for loss, deficiency, damage, or delay, shall at any time be deducted from the amount of freight due on the bill of lading, the proper deductions being made from any amounts due, or which may become due, on other bills of lading. If, however, stores are taken from the trains of the said —, by competent authority before reaching their destination, the said — shall be allowed — per cent. on contract rates to the point of actual delivery: *Pro-*

vided, That no greater amount shall be allowed in any case than would have accrued if the stores had been transported to original destination.

XVI. The government may, whenever it is deemed advisable, contract for fuel or forage to be delivered at any of the posts within the Department of ———; and may also carry stores and supplies in its own teams to and from any points within the route, at its pleasure.

XVII. The word “stores,” wherever appearing in this agreement, shall be understood to mean any property of the United States, pertaining to any department thereof, which may be required to be transported by the Quartermaster's Department; also any personal property or baggage of officers, troops, and others, in the military service of the United States, the transportation of which, at public expense, by the Quartermaster's Department, is authorized by law, or by regulations and orders of the War Department.

XVIII. For transportation furnished under this agreement, the said ——— shall be paid as follows, viz:

For the immediate transportation of stores weighing less than two thousand pounds, as provided in Article V of this agreement, such reasonable rates, not exceeding those paid to express companies for like service, as may be agreed upon in writing between the said ——— and the said ———, which agreement shall be filed with the bill of lading.

For the transportation of stores weighing two thousand pounds and upward, for the whole distance from ——— to ———, which is hereby agreed to be ——— miles, ——— dollars and ——— cents per one hundred pounds; and at the same rate per one hundred pounds per one hundred miles for transportation to, from, or between all other points on or near the route, as set forth in Article I, the distance between such points to be determined by the chief quartermaster of the department under direction of the Department Commander: *Provided*, That when, in accordance with the provisions of Article III of this agreement, horse and mule teams less than ——— in number are furnished for the expeditious movement of public stores, within ——— days from receipt of notice signed or approved in writing by the forwarding officer or agent, the said ——— shall be paid the rates hereinbefore specified, and an allowance of ——— per cent. in addition thereto. *Provided further*, That the said ——— shall not be entitled to receive the said additional compensation of ——— per cent. unless ——— shall have performed the service within the time specified in this contract for horse or mule teams. And it is hereby agreed that the said additional compensation provided for in this article for expeditious movements, as contemplated by Article III, shall be contingent upon the completion of the service within the time herein allowed for expeditious movements.

XIX. Payments under this agreement shall be made at the office of the disbursing quartermaster at ———, in the funds furnished for the purpose by the United States, at the rates hereinbefore specified: *Provided*, That from all payments so made ——— per cent. shall be withheld by the disbursing officer until this agreement shall have been fully accomplished.

XX. Neither this contract nor any interest therein shall be transferred by the said ——— to any other party; and any such transfer shall cause the annulment of the contract so far as the United States are concerned. All rights of action, however, to recover from any breach of this contract by the said ———, are reserved to the United States.

XXI. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add, to any contract made with an incorporated company for its general benefit, the following words, viz: “But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract.”—See sec. 3740, Revised Statutes.]

XXII. This contract shall be subject to approval of the Quartermaster-General.

In witness whereof the undersigned have here unto placed their hands and seals the date first hereinbefore written.

—————, [L. S.]
 ——— Quartermaster ———, U. S. A.
 ———, [L. S.]

Witnesses:

—————
 ———

(Executed in quintuplicate.)

Approved: ———, 18—.

—————,
 ——— Commanding ———.

—————
 ———

ed: ———, 18—.

—————, ———
 ——— Commanding ———.
 ———
 ———.

dd, on the quintuplicate copy of contract intended for the Returns Office, out of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

FORM OF CONTRACT FOR STEAMBOAT TRANSPORTATION.

of agreement entered into at ———, this ——— day of ———, eighteen hundred and ———, between ———, ——— quartermaster ———, United States Army, of the part, and ———, of the county of ———, State of ———, of the second

reement witnesseth, That the said ———, ——— quartermaster ———, for and on behalf of the United States of America, and the said ———, for ———, ——— contractors, and administrators, have mutually agreed, and by these presents do covenant and agree, to and with each other, as follows, viz:

The said ——— shall furnish all the steamboat transportation required by the United States for officers, soldiers, and government employes, on the ———, from ——— at any time from ——— to ———, eighteen hundred and ———, and shall at any time during such period all such public stores as may be turned over to ——— agent, in good order and condition for transportation, by the officer of the Quartermaster's Department at ———, and transport the same with ——— and deliver them, in like good order and condition, to the officer or agent of the Quartermaster's Department on duty or designated to receive them at ———: *Provided* that the said ——— shall have the privilege of using wagons and teams for the transportation herein provided for whenever the water is too low for steamboat transportation. A guard shall be furnished, when necessary, for the protection of stores while on over land, on application, in writing, by the said ———, or ——— agent, commanding officer of the nearest military post.

The said ——— shall employ for the service required by this contract such steamships as shall be safe and satisfactory to the shipping-officer, and as shall have been approved by the United States inspector of steamboats for the district of ———. Baggage shall be provided for officers, one hundred and fifty (150) pounds of baggage to be allowed for each officer, free of charge. Kitchen-room, cooking-stoves, and all other proper accommodation shall be provided for the use of enlisted employes, eighty (80) pounds of baggage to be allowed for each person, free of charge. Troughs and proper conveniences shall be provided for transporting, feeding, and watering horses, mules, and cattle, ——— pounds weight for forage being allowed for each animal, free of charge.

The said ——— shall have a place of business or agency at ———, and at such places as may be designated by the said ———. Written notice shall be given ———, or ——— agent, at ——— place of business or agency nearest the point where troops, animals, or stores are to be transported, of the number of men and the quantity and kind of stores, to be transported, when and where they are to be delivered to ———, and their destination (subject to such changes as may occur while in transitu), as follows, viz: [Here state the number of days' notice to be given to the contractor for each post from which transportation is to be furnished.] That such notice shall not be required when the said ——— shall have sufficient means of transportation at the point from which shipment is to be made: In every such case the bill of lading shall be taken and considered as sufficient

In case of failure, by reason of deficiency in the quantity or quality of the means of transportation furnished, or from any other cause on the part of the said ———, to comply with the demands and requirements made upon ——— for transportation under this agreement, after due notice shall have been given the said ———, or agent, as provided in Article III, then the officer or authorized agent of the Quartermaster's Department in charge of transportation shall have power to supply the deficiency either by purchase, hire, special contract, or the use of government transportation, as the said officer or agent may elect; and the said ——— shall be liable for any expense incurred by the government in excess of the rates herein provided, which amount to be deducted from any moneys due, or to become due, the said

stores and supplies to be transported under this agreement shall be accompanied by bills of lading setting forth the number, kind, weight, and destination thereof, and containing the usual exceptions of the dangers of navigation, to be receipted by the officer or authorized agent of the Quartermaster's

Department at the place of destination, as hereinafter provided. Officers, troops, and employes shall be furnished with transportation requests, the certificates on which shall be signed by the proper parties when the transportation shall have been furnished, and upon such receipts and certificates payments shall be made to the said ———, as hereinafter provided; demurrage shall also be allowed for all unusual or unnecessary detention *en route*, caused by proper military orders, in writing, at the rate of ——— per ton, registered tonnage, per twenty-four hours, not to exceed in any case the sum of ——— dollars per day of twenty-four hours.

VI. Upon the arrival of the stores at their place of destination or delivery the officer or agent of the Quartermaster's Department thereat shall indorse the bill of lading in accordance with the facts, if all the stores are in good order and condition, or if deficiencies or damage chargeable to the said ——— are then and there admitted by the said ———, or ——— agent; if not, then in accordance with the finding of a Board of Survey, as hereinafter provided, stating the quantity and condition of the stores delivered; upon which indorsement payment shall be made, deducting for any articles missing, lost, destroyed, or damaged, which the Board of Survey may find to be properly chargeable to the said ———, at the rates specified in Article VII of this agreement.

VII. In all cases where stores have been transported by the said ———, under this agreement, and loss, damage, deficiency, or delay, not then and there admitted to be chargeable to the said ———, has occurred, a Board of Survey (to be applied for, in writing, by the said ———, or ——— agent, one member of which board shall, when practicable, and subsistence stores are involved, be an officer on duty in the Subsistence Department) shall be called without delay, upon their arrival at the point of destination or delivery, to examine the quantity and condition of the stores transported, investigate the facts, report the apparent causes, assess the amount of loss, deficiency, or damage, and state whether they were attributable to want of proper care or to neglect on the part of the said ———, or ——— agents or employes, or to causes beyond ——— or ——— control; and these proceedings, a copy of which shall be furnished the said ———, shall, after due approval and confirmation, be attached to the bill of lading, and shall govern the payments to be made on it. For loss of weight due to shrinkage, and for leakage of vinegar, molasses, or other liquids, the said ——— shall not be held liable if the packages are delivered in good order and condition and the Board of Survey shall be satisfied that such shrinkage or leakage did not arise from want of proper care or from neglect on the part of the said ———, or ——— agents. For loss, deficiency, or damage, attributable to the said ———, or ——— employes, the said ——— shall pay twice the cost of the stores lost, deficient, or damaged, at the place where they were turned over to the said ———, and no freight whatever shall be allowed on stores lost or deficient. In case of damage, freight shall be deducted in proportion to the quantity damaged. If the amount found due for loss, deficiency, or damage shall at any time exceed the amount of freight due on the bill of lading, the proper deduction shall be made from any amounts due, or which may become due, the said ——— for other services rendered under this agreement.

VIII. The government will, whenever deemed advisable, contract for forage to be delivered at ———, or any post, station, or Indian agency between ——— and ———. It is understood that this agreement shall not be so construed as to prevent the transportation of troops or public property of any kind on any boat belonging to the United States.

IX. For and in consideration of the faithful performance of the stipulations of this agreement, the said ——— shall be paid at the office of the disbursing quartermaster at ———, or other designated point or points, in the funds furnished for the purpose by the United States, according to the following rates, viz:

From—	To—					
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
Officers, each						
Enlisted men, laundresses, and employes, each						
Horses, mules, or cattle, each						
Stores, per 100 pounds						

X. The word "*stores*," whenever appearing in this agreement, shall be understood to mean any property of the United States pertaining to any department thereof, which may be required to be transported by the Quartermaster's Department; also any personal property or baggage of officers, troops, and others in the military service of the United States, the transportation of which, at public expense, by the Quartermaster's Department, is authorized by law, or by regulations and orders of the War Department.

I. Neither this contract nor any interest therein shall be transferred by the said — to any other party; and any such transfer shall cause the annulment of the contract so far as the United States are concerned. All rights of action, however, to recover for any breach of this contract by the said — are reserved to the United States.

II. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any part of this contract, or to any benefit which may arise herefrom. [Here add, in any contract made with an incorporated company for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract."—See sec. 3740, Revised Statutes.]

III. This contract shall be subject to approval of the Quartermaster-General, U.

witness whereof the undersigned have hereunto placed their hands and seals the first hereinbefore written.

_____, [L. S.]
 _____ Quartermaster _____, U. S. A.
 _____, [L. S.]

Witnesses:

Executed in quintuplicate.)

Approved: _____, 18—.

_____,
 _____ Commanding _____.

Approved: _____, 18—.

_____,
 _____ Commanding _____.

Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

FORM OF CHARTER-PARTY FOR OCEAN AND LAKE VESSELS.

Articles of agreement entered into at _____, this _____ day of _____, eighteen hundred and _____, between _____, _____ quartermaster _____, United States Army, of the first part, and _____, of the county of _____, State of _____, of the second part. This agreement witnesseth: That the said _____, _____ quartermaster _____, for and behalf of the United States of America, and the said _____, owner (or authorized agent of the owner) of the steamer (or ship, bark, brig, &c.) called the [here give name of vessel], of _____, of the burden of _____ registered tons, or thereabouts, at present lying in the harbor of _____, and commanded by _____, for _____, _____, heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows, viz:

I. The said _____ does hereby grant and let, and the said _____, _____ quartermaster _____, does hereby take, the _____ for the voyage or voyages hereinafter mentioned, and for such longer time as she may be required in the military service of the United States, not to extend beyond the thirtieth day of June, eighteen hundred and _____, unless this charter shall be renewed on or before that date.

I. The said vessel shall, on the _____ day of _____, eighteen hundred and _____, be ready to load and receive on board at _____, or elsewhere, whenever tendered alongside by the quartermaster United States Army, or his agent, only such troops, persons, animals, and supplies or cargo, as he shall order and direct, and as the said vessel can conveniently stow and carry (reserving sufficient room for the stowage of the vessel's cables and materials, accommodation of the officers and crew, and, if a steam vessel, for necessary supply of coal); and when so laden shall proceed, with the best good opportunity, and without delay, from the port of _____, or elsewhere, direct to such ports and places as ordered by the proper officer of the Quartermaster's Department, and deliver the cargo in good order and condition (the dangers of the seas, fire, navigation, and the restraints of princes and rulers, being always excepted), to the quartermaster or quartermasters, or the duly authorized agent or agents of the Quartermaster's Department, at the ports and places to which said vessel is ordered to proceed.

I. All cargo shall be received and delivered within reach of the ship's tackles.

I. The said vessel now is, and shall be kept and maintained while in the service of the United States, tight, staunch, strong, and well and sufficiently manned, victualled,

tackled, appareled, and ballasted, and furnished in every respect fit for merchant or transport service, at the cost and charge of her owner. The time lost in consequence of any deficiency in these respects, and in making repairs to said vessel not attributable to the fault of the United States, or its agents, is not to be paid for by the United States.

V. All port charges and pilotage in and out of different ports, where the employment of local pilots is necessary for the safe navigation of said vessel in dangerous waters, will be paid by the United States, after leaving the port of ———; but nothing herein shall be construed as binding the United States to pay the monthly wages of any person employed by the said ———, or his agent, continuously on said vessel as pilot.

VI. The war risk shall be borne by the United States; the marine risk by the owner.

VII. The United States will furnish all the fuel necessary to propel the vessel, if a steamer, until the said vessel is returned to the said ———, at ———, in the same order as when received, ordinary wear and tear, damage by the elements, collision at sea and in port, bursting of boilers, and breakage of machinery excepted.

VIII. For and in consideration of the faithful performance of the stipulations of this agreement, the said ——— shall be paid for each and every ——— said vessel may be employed, the sum of ——— dollars.

IX. Payment shall be made at the office of the disbursing quartermaster at ——— in the funds furnished for the purpose by the United States, upon presenting certificates of the proper officer or agent of the Quartermaster's Department that the said vessel has faithfully performed her part of this contract.

X. The said vessel is valued and appraised at the sum of ——— dollars, and should she be retained so long in the service of the United States that the money paid and due on account of this charter or its renewals (deducting therefrom the actual cost of running and keeping in repair the said vessel during the said time, together with a net profit of ——— per cent. per annum on said appraised value) shall be equal to said appraised value, then the said vessel shall become the property of the United States without further payment, except such sum as may then be due on account of the services of the said vessel rendered under this charter or its renewals.

XI. If at any time during the continuance of this charter, or its renewals, the United States shall elect to purchase the said vessel, they shall have the right to take her at the appraised value at the date of charter, and all money then already paid and due on account of said charter, or its renewals (deducting therefrom the actual cost of running and keeping in repair the said vessel during the said time, together with a net profit of ——— per cent. per annum on the original appraised value), shall apply on account of the said purchase.

XII. This charter shall go into effect at ——— o'clock — m. of the ——— day of ———, 18—.

XIII. If the said [here give name of vessel] shall be in the service of the United States, under this charter, on the thirtieth of June, eighteen hundred and ———, the United States may, at its option, renew this charter for a period not to extend beyond the end of the next fiscal year, and shall have the privilege of such renewal at the expiration of each fiscal year thereafter, if the charter is then in force.

XIV. Neither this contract nor any interest therein shall be transferred by the said ——— to any other party; and any such transfer shall cause the annulment of the contract so far as the United States are concerned. All rights of action, however, to recover for any breach of this contract by the said ——— are reserved to the United States.

XV. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add, to any contract made with an incorporated company for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract."—See sec. 3740, Revised Statutes.]

XVI. This contract shall be subject to approval of the Quartermaster-General.

In witness whereof the undersigned have hereunto placed their hands and seals the date first hereinbefore written.

—————, [L. S.]
 ——— Quartermaster ———, U. S. A.
 ———, [L. S.]

Witnesses:

—————
 ———

(Executed in quintuplicate.)

Approved: ———, '8—.

—————, [L. S.]
 ——— Commanding ———.

—————
 ———

Approved: ———, 18—.

—————, ———,
 ——— Commanding ———.
 ——— ———.
 ——— ———.

[Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

FORM OF CHARTER-PARTY FOR RIVER STEAMERS AND BARGES.

Articles of agreement entered into at ———, this ——— day of ———, eighteen hundred and ———, between ———, ——— quartermaster ———, United States Army, of first part, and ———, of the county of ———, State of ———, of the second part. This agreement witnesseth: That the said ———, ——— quartermaster ———, for and in behalf of the United States of America, and the said ———, owner (or manager, owner, or duly authorized agent of the owner or owners) of the steamer (or barge) called the [here give name of steamer or barge], of ———, of the burden of ——— registered tons, or thereabouts, at present lying at ———, and commanded by ———, for ———, ——— heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows,

I. The said ——— does hereby grant and let, and the said ———, ——— quartermaster ———, does hereby take, the steamer (or barge) ——— for the military service of the United States, for such time as said steamer (or barge) may be required, not to extend beyond the thirtieth day of June, eighteen hundred and ———, unless this charter shall be renewed on or before that date.

II. The captain or master in command of said steamer (or barge) shall, while the same is employed in the military service of the United States, obey all lawful orders of the officers of the Quartermaster's Department of the United States Army, and shall admit and receive on board, at any accessible point on the ——— River, or its tributaries, or river to which it is tributary, whenever tendered alongside by the quartermaster, United States Army, or his agent, only such troops, persons, animals, and supplies, as he shall order and direct, and as the said steamer (or barge) can conveniently load and carry, and transport them without delay to such points and places, and there deliver them to such officers or agents of the Quartermaster's Department, as may be directed.

III. The said ——— now is, and shall be kept and maintained while in the service of the United States, tight, staunch, strong, and well and sufficiently manned, victualled, and appareled, and furnished in every respect fit for transport service, at the cost and charge of her owner. The time lost in consequence of any deficiency in these respects, and in making repairs to said steamer (or barge), not attributable to the fault of the United States or its agents, is not to be paid for by the United States.

IV. The war risk shall be borne by the United States; the marine risk by the owner.

V. The United States will furnish all the fuel necessary to propel the said steamer (or barge) while employed in the military service.

VI. The United States shall return the said steamer (or barge) to the said ———, at ———, in the same order as when received, ordinary wear and tear, damage by the elements, collision, bursting of boilers, and breakage of machinery, excepted.

VII. For and in consideration of the faithful performance of the stipulations of this agreement, the said ——— shall be paid, for each and every day of twenty-four hours the said steamer (or barge) may be employed, the sum of ——— dollars.

VIII. Payment shall be made at the office of the disbursing quartermaster at ———, of the funds furnished for the purpose by the United States, upon presenting certificates of the proper officer or agent of the Quartermaster's Department that the said steamer (or barge) has faithfully performed her part of this contract.

IX. The said steamer (or barge) is valued and appraised at the sum of ——— dollars, and should she be retained so long in the service of the United States that the money paid and due on account of this charter, or its renewals (deducting therefrom the actual cost of running and keeping in repair the said steamer (or barge), during the said time, together with a net profit of ——— per cent. per annum on said appraised value), shall be equal to said appraised value, then the said steamer (or barge) shall become the property of the United States without further payment, except such sum may then be due on account of the services of the said steamer (or barge), rendered under this charter or its renewals.

X. If at any time during the continuance of this charter, or its renewals, the United States shall elect to purchase the said steamer (or barge), they shall have the right to purchase her at the appraised value at the date of charter, and all money then already paid and due on account of said charter, or its renewals (deducting therefrom the actual

cost of running and keeping in repair the said steamer (or barge) during the said time, together with a net profit of ——— per cent. per annum on the original appraised value), shall apply on account of the said purchase.

XI. This charter shall go into effect at ——— o'clock — m. of the ——— day of ———, 18—.

XII. If the said steamer (or barge) shall be in the service of the United States, under this charter, on the thirtieth day of June, eighteen hundred and ———, the United States may, at its option, renew this charter for a period not to extend beyond the end of the next fiscal year, and shall have the privilege of such renewal at the expiration of each fiscal year thereafter, if the charter is then in force.

XIII. Neither this contract nor any interest therein shall be transferred by the said ——— to any other party; and any such transfer shall cause the annulment of the contract so far as the United States are concerned. All rights of action, however, to recover for any breach of this contract by the said ———, are reserved to the United States.

XIV. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add to any contract made with an incorporated company, for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract."—See sec. 3740, Revised Statutes.]

XV. This contract shall be subject to approval of the Quartermaster-General, U. S. A.

In witness whereof the undersigned have hereunto placed their hands and seals the day first hereinbefore written.

—————, [L. S.]
 ——— Quartermaster ———, U. S. A.
 ———, [L. S.]

Witnesses:

—————
 ———

(Executed in quintuplicate.)

Approved: ———, 18—.

—————,
 ——— Commanding ———.
 ———
 ———

Approved: ———, 18—.

—————,
 ——— Commanding ———.
 ———
 ———

[Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

FORM OF CONTRACT FOR CLOTHING, CAMP AND GARRISON EQUIPAGE, WAGONS, AMBULANCES, HARNESS, AND ALL OTHER QUARTERMASTER'S STORES WHICH ARE REQUIRED TO CONFORM TO SPECIFICATIONS AND SEALED STANDARDS.

Articles of agreement entered into at ———, this ——— day of ———, eighteen hundred and ———, between ———, ——— quartermaster ———, United States Army, of the first part, and ———, of the county of ———, State of ———, of the second part.

This agreement witnesseth: That, in conformity with the advertisement and specifications hereunto attached, and which, so far as they relate to this contract, form a part of it, the said ———, ——— quartermaster ———, for and in behalf of the United States of America, and the said ———, for ———, ——— heirs, executor, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows, viz:

I. The said ——— shall have manufactured, and delivered at ———, by or before the ——— day of ———, 18—, the following named articles: [Here insert number and description of articles to be supplied.]

II. The articles herein contracted for shall be like and equal in all respects to ——— in the office of the ——— at ———, and on which this contract is based, and each piece or article, or package thereof, as the case may be, shall be marked with the contractor's name and the date of the contract.

III. Deliveries of the articles herein contracted for shall be made as follows: [Here set forth, in proper detail, what should be specified with reference to delivery of the articles.]

IV. The articles herein contracted for shall be examined and inspected without unnecessary delay after being delivered, by a person or persons appointed by the United States; and after such inspector shall have certified that they are in all respects as required by this contract, and fully equal to the sample aforesaid, they shall be received and become the property of the United States. Any and all articles that may, upon such inspection, be condemned or rejected, shall be removed from the premises within _____ days after the said _____, or _____ agent, shall have been notified of such rejection.

V. The said _____ shall receive for the supplies accepted from him hereunder the following prices, viz: [Here set forth the prices of the articles according to the unit of weight, measure, or number] to be paid by the disbursing quartermaster at _____, as soon as practicable after acceptance of the supplies, in the funds furnished for the purpose by the United States, withholding _____ per cent. from each payment until the whole number or quantity thereof herein contracted for shall have been delivered and inspected and accepted by the United States.

VI. In case of the failure of the said _____ to perform the stipulations of this contract within the time and in the manner specified herein, the said _____ may supply the deficiency by purchase, in open market or otherwise (the articles so procured to be of the kind herein specified, as near as practicable), and the said _____ shall be charged with the expense resulting from such failure.

VII. Neither this contract nor any interest therein shall be transferred by the said _____ to any other party; and any such transfer shall cause the annulment of the contract so far as the United States are concerned. All rights of action, however, to recover for any breach of this contract by the said _____, are reserved to the United States.

VIII. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add, to any contract made with an incorporated company, for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract."—See sec. 3740, Revised Statutes.]

IX. This contract shall be subject to approval of the Quartermaster-General, U. S. A. In witness whereof the undersigned have hereunto placed their hands and seals the date first hereinbefore written.

_____, [L. S.]
 _____ Quartermaster _____, U. S. A.
 _____, [L. S.]

Witnesses:

(Executed in quintuplicate.)

Approved: _____, 18—.

_____,
 Quartermaster-General, U. S. Army.

WAR DEPARTMENT,

Quartermaster-General's Office, _____, 18—.

[Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

FORM OF LEASE.

Articles of agreement entered into at _____, this _____ day of _____, eighteen hundred and _____, between _____, _____ quartermaster _____, United States Army, of the first part, and _____, of _____, of the county of _____, State of _____, of the second part.

This agreement witnesseth: That, for and in consideration of the payments and covenants hereinafter mentioned, to be made and performed by the said _____, the said _____, _____ heirs, executors, and administrators, have covenanted and agreed as follows:

I. The said _____, _____ heirs, executors, and administrators, shall, and by these presents do hereby, demise, let, rent, and lease to the United States of America [here describe the premises], to have and to hold the same, with all the hereditaments and improvements thereunto belonging _____, from the _____ day of _____, eighteen hundred and _____, to the _____ day of _____, eighteen hundred and _____, or as long as required by the United States, not extending, however, beyond the thirtieth day of June, eighteen hundred and _____. [Here insert any special conditions which may have been agreed upon.]

II. If the said premises shall be in the possession of the United States on the thirtieth day of June, 18—, under this lease, the United States may, at its option, renew this lease for a period not extending beyond the end of the next fiscal year, with all the covenants and agreements herein contained, and shall have the privilege of such renewal at the expiration of each fiscal year thereafter, if the lease is then in force.

III. The said ———, ——— heirs, executors, and administrators, will warrant and defend to the United States, its officers and agents, the quiet and peaceable possession and occupancy of the aforesaid premises, and in case of any disturbance, by suit or otherwise, will defend the same free of charge to the United States in or before the proper State or United States courts.

IV. All buildings or other improvements fixed to, or erected or placed in or upon the said leased premises, by the United States, shall be and remain the exclusive property of the United States, provided, however, that the same, unless sold or otherwise disposed of, shall be removed by the United States within ——— days after the said premises are vacated under this lease.

V. The United States reserves the right to quit, relinquish, and give up the said premises within the period for which this lease is made or may be renewed, by giving to the said ———, or ——— agent [here state length of notice], notice.

VI. For and in consideration of the above covenants and agreements, the United States shall pay to the said ———, or ——— agent, the sum of ——— dollars and ——— cents per ———.

VII. Payment shall be made at the end of each calendar month, or as soon as practicable thereafter, at the office of the disbursing quartermaster at ———, in the funds furnished for the purpose by the United States.

VIII. Neither this lease nor any interest therein shall be transferred by the said ——— to any other party; and any such transfer shall cause the annulment of the lease so far as the United States are concerned. All rights of action, however, to recover for any breach of this contract by the said ———, are reserved to the United States.

IX. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add to any contract made with an incorporated company, for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract."—See sec. 3740, Revised Statutes.]

X. This contract shall be subject to approval of the Quartermaster-General, U. S. A.

In witness whereof the undersigned have hereunto placed their hands and seals the date first hereinbefore written.

—————, [L. S.]
 ——— Quartermaster ———, U. S. A.
 ———, [L. S.]

Witnesses:

—————
 ———

(Executed in quintuplicate.)

Approved: ———, 18—.

—————,
 ——— Commanding ———
 ———
 ———

Approved: ———, 18—.

—————,
 ——— Commanding ———
 ———
 ———

[Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

NOTE.—Leases will only extend to the close of the fiscal year within which they are made, but will provide for renewal as often as required by the United States. No lease will be made or renewed in the absence of an appropriation for the payment of the rent.

VI. SUBSISTENCE DEPARTMENT.

1. Fresh beef or other fresh meats will be provided, when practicable, by contract according to the following form:

FORM OF CONTRACT FOR FRESH BEEF.

Articles of agreement entered into this _____ day of _____, eighteen hundred and _____, between _____, United States Army, of the first part, and _____, of the county of _____, State of _____, of the second part.

This agreement witnesseth: That the said _____, for and in behalf of the United States of America, and the said _____, for _____, _____ heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows, viz:

I. The said _____ shall deliver to the acting assistant commissary of subsistence at _____, on such days and at such hours as, under the direction of his commanding officer, he shall designate, such quantities of fresh beef as from time to time he may require.

II. The fresh beef shall be good in quality and condition, fit for immediate use, and from fore and hind quarter meat proportionally, including all the best cuts thereof. Beef from bulls, stags, or diseased cattle, shall not be delivered. The necks of the cattle slaughtered for beef shall be cut off at the fourth vertebral joint, and the heads trimmed down; the shanks of fore-quarters shall be cut off four inches above the knee-joint, and of hind-quarters eight inches above the hock-joint. Necks, shanks, and kidney tallow shall be excluded from delivery.

III. The said _____ shall receive for the fresh beef accepted from him hereunder, _____ (_____) cents per pound, to be paid by the acting assistant commissary of subsistence at the end of each calendar month, or as soon as practicable thereafter, in the funds furnished for the purpose by the United States.

IV. Whenever, in the opinion of the commanding officer at _____, the fresh beef presented for delivery under this contract is not of the kind stipulated for, he shall immediately convene a board of officers, to consist of as many members, not exceeding three (3), as can be assembled. The board shall at once examine such beef, and its finding shall be conclusive in regard thereto.

V. In case of failure of the said _____ to deliver fresh beef as herein stipulated, the acting assistant commissary of subsistence is authorized to supply by purchase, in open market, any deficiency resulting from such failure (the beef so procured to be of the kind herein specified, as near as practicable), and the said _____ shall be charged with any excess of cost over that of furnishing at contract price.

VI. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add, to any contract made with an incorporated company for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract." See Sec. 3740, Revised Statutes.]

VII. This contract shall be in force from the _____ day of _____, eighteen hundred and _____, to the _____ day of _____, eighteen hundred and _____, inclusively, or such less time as the Commissary-General of Subsistence may direct.

VIII. This contract shall be subject to approval of the Commissary-General of Subsistence, U. S. A.

In witness whereof the undersigned have hereunto placed their hands and seals the date first hereinbefore written.

_____, [L. S.]

_____.

_____, [L. S.]

Witnesses:

_____.

(Executed in quintuplicate.)

Approved: _____, 18—.

_____,
_____ Commanding _____.

_____.

Approved: _____, 18—.

_____,
_____ Commanding _____.

_____.

[Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

2. When the necessities of the service shall so require, beef-cattle will be provided when practicable, by contract according to the following form:

FORM OF CONTRACT FOR BEEF-CATTLE.

Articles of agreement entered into this _____ day of _____, eighteen hundred and _____, between _____, United States Army, of the first part, and _____, of the county of _____, State of _____, of the second part.

This agreement witnesseth: That the said _____, for and in behalf of the United States of America, and the said _____, for _____, _____ heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows, viz:

I. The said _____ shall deliver to the acting assistant commissary of subsistence at _____, between the _____ day of _____, eighteen hundred and _____, and the _____ day of _____, eighteen hundred and _____, _____ (_____) head of beef-cattle, aggregating as near as practicable _____ (_____) pounds net weight.

II. The beef-cattle shall be _____ stock, good in quality and condition, fit for immediate slaughter and use, between _____ and _____ years of age, and no animal shall weigh less than _____ nor more than _____ pounds gross. Cows, heifers, bulls, stags, and cattle that are hornless, wild, lame, or diseased, shall not be delivered.

III. The net weight of the beef-cattle shall be determined in the following manner: If practicable, the cattle shall be weighed; in which case they shall be kept twelve hours, immediately before weighing, without food or water. Their net weight shall be considered at 55 per cent. of the gross weight when the animal weighs 1,300 pounds or more, 50 per cent. when weighing between 1,300 and 800 pounds, and 40 per cent. when weighing 800 pounds or less.

If impracticable to weigh the cattle, the herd will be separated into three lots, according to apparent weight—heavy, medium, light—or into a greater number of lots if the herd is large and the cattle of great diversity in weight. From each lot an animal will be selected as of the average weight and condition thereof, killed, and dressed and trimmed as follows: necks cut off at the fourth vertebral joint, breasts trimmed down, shanks of fore-quarters cut off four inches above the knee-joint, shanks of hind-quarters cut off eight inches above the hock-joint. The accurate scale weight of the carcass of each animal thus dressed and trimmed (excluding necks, shanks, and kidney-tallow) shall be considered as the average net weight of the cattle of the lot from which the animal was taken.

IV. The delivery of the beef-cattle shall be accomplished in the following manner: When the said _____ shall be ready to deliver the cattle he shall so notify the acting assistant commissary of subsistence.

If there be a commanding officer at _____, the acting assistant commissary of subsistence shall at once report such notification to him. Thereupon the commanding officer shall immediately convene a board of officers, to consist of as many members, not exceeding three (3), as can be assembled, one of whom shall be the acting assistant commissary of subsistence, and the others shall be preferably company commanders. The acting assistant commissary of subsistence and the commanding officer shall comprise the board if no other officers are available. As soon as practicable the board shall personally inspect the cattle, select such as conform to the requirements of this contract, and determine their net weight in the manner prescribed in the preceding article. Upon the determination of such net weight the acting assistant commissary of subsistence shall receive the cattle so selected and plainly brand them on the left hind-quarter with the letters U. S.

If the acting assistant commissary of subsistence be the only officer on duty at _____, he shall at once pursue the course prescribed in preceding paragraph for a board of officers.

The board shall furnish a report (or the acting assistant commissary of subsistence shall furnish a certificate, as the case may be) setting forth fully the method pursued for determining the net weight of the selected cattle, the several steps taken by them (or him) in the performance of their (or his) whole duty relating to this contract, and the number of head and aggregate net weight of the selected cattle.

V. The said _____ shall receive for the beef-cattle accepted from him hereunder _____ cents per pound net, to be paid by _____, as soon as practicable after acceptance of the cattle, in the funds furnished for the purpose by the United States.

VI. In case of failure of the said _____ to deliver beef-cattle as herein stipulated, the acting assistant commissary of subsistence is authorized to supply by purchase, in open market or otherwise, any deficiency resulting from such failure (the cattle so procured to be of the kind herein specified as near as practicable), and the said _____ shall be charged with any excess of cost over that of furnishing at contract price.

VII. No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here

to any contract made with an incorporated company, for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract." See sec. 3740, Revised Statutes.]

III. This contract shall be subject to the approval of the Commissary-General of Subsistence, U. S. A.

In witness whereof the undersigned have hereunto placed their hands and seals the first hereinbefore written.

_____, [L.S.]

_____, [L. S.]

Witnesses:

_____.

_____.

Executed in quintuplicate.)

Approved: _____, 18—.

_____,

_____, Commanding _____.

_____.

_____.

Approved: _____, 18—.

_____,

_____, Commanding _____.

_____.

_____.

Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit page 19.]

NOTE.—When from absolute necessity there is no alternative except to take cattle in poor condition, the contract should prescribe, for the determination of their net weight, a suitable lower rate per cent. than is given in Article III of this Form.

In framing the stipulation of a contract for beef-cattle the stock of the cattle should be appropriately designated, as, for example, "tame American," "Texas," "Indian," or "Cherokee," &c.; and when practicable to obtain them, only cattle from four to seven years of age, and to weigh not less than 1,000 pounds gross, each, should be contracted for. If it be impracticable to procure cattle weighing 1,000 pounds gross, or upward, at economical rates, or there would be waste in issuing from such sized cattle owing to the limited number of troops to be supplied, or if there be other sufficient reasons, the stipulations of the contract should provide for smaller cattle.

The report of the board of officers convened for the purpose of inspecting, selecting, and determining net weight of the beef-cattle presented for delivery under a contract (or the certificate of the acting assistant commissary of subsistence in regard to the same matter, as the case may be) will be made in quadruplicate; two copies for the acting assistant commissary of subsistence, to be filed with his return of provisions, and two for the officer who is to make payment for the cattle received, to be filed with his voucher for such payment. If the acting assistant commissary of subsistence is to make the payment, the certificate will be made in duplicate and will be filed with his voucher for such payment.

When sufficient pasturage cannot be obtained for the beef-cattle belonging to the United States, then hay, corn, fodder, or other articles of feed suitable for them and required for their support, will, if not provided by the labor of troops, be procured, when practicable, by contract according to the following form, which will also be included in contracts for all subsistence supplies except fresh meats and beef-cattle:

FORM OF CONTRACT FOR SUBSISTENCE SUPPLIES.

Articles of agreement entered into this _____ day of _____, eighteen hundred and _____, between _____ United States Army, of the first part, and _____, of the county of _____, State of _____, of the second part.

This agreement witnesseth: That the said _____, for and in behalf of the United States of America, and the said _____, for _____, _____ heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other as follows, viz:

The said _____ shall deliver to _____, at _____, between the _____ day of _____, eighteen hundred and _____, and the _____ day of _____, eighteen hundred and _____, subsistence supplies as follows, viz:

Pork, light mess, _____ (— —) barrels, each barrel containing not less than two hundred (200) pounds of pork.

Bacon, short clear sides, ——— (———) pounds, in boxes, each box containing about ——— (———) pounds of bacon.

Flour, extra, ——— (———) pounds, in sacks, each sack containing ——— (———) pounds of flour.

Beans, white, ——— (———) pounds, in sacks, each sack containing ——— (———) pounds of beans.

Hay, timothy, ——— (———) tons, in stacks, each stack containing about ——— (———) tons of hay.

Hams, sugar-cured ——— (———) pounds, in tierces, each tierce containing about ——— (———) pounds of ham.

Lard, pure leaf, ——— (———) pounds, in cases, each case containing ——— (———) tins, each tin containing ——— (———) pounds of lard.

II. The pork shall be cut and packed from sides of reasonably well fattened hogs, in strips; the hog to be first split through the backbone, or if split on one side, then an equal proportion of hard and soft sides, as they are termed, must be packed, properly flanked, and not back-strapped. One hundred and ninety (190) pounds of green meat, numbering not over twenty-two (22) pieces, including the regular proportion of flank and shoulder cuts, placed on edge without excessive crowding or bruising, must be packed into each barrel, with not less than thirty-five (35) pounds of good foreign, or forty (40) pounds of good domestic, coarse salt, and filled up full with good clear brine, as strong as salt will make it. The pork shall be cut reasonably uniform in width. It shall be packed between November 1st and March 1st.

The bacon shall be made from well fattened hogs. It shall consist of pieces of medium weight and thickness, perfectly cured, slowly and thoroughly smoked, dry and firm; no soft, moist, or spongy pieces to be received. The backbone, breastbone, and ribs shall be taken out, and henchbone sawed down smooth and even with the face of the side; feather of the bladebone not to be taken out; edges to be left smooth; side not to be back-strapped or flanked. The bacon shall be packed between November 1st and March 1st.

The flour shall be freshly made, wholly from original stock of sound ——— wheat, high ground, well dressed, in all respects equal to the sample furnished, and shall be well tested by baking before acceptance.

The beans shall be of the last crop, sound, dry, uniform in size, hand picked, in all respects equal to the sample furnished.

The hay shall be cut in the months of ——— and ———, eighteen hundred and ———. It shall be properly cured, of good quality, free from weeds, roots, sticks, and dirt.

The hams shall be of the best quality, from eight (8) to fourteen (14) pounds weight each, averaging ten (10) pounds, neatly and closely trimmed, perfectly cured, slowly and thoroughly smoked; cut short, well rounded at the butt, properly faced, cut just above the hock-joint. They shall be covered with new, strong cotton cloth. The hams shall be packed between November 1 and March 1.

The lard shall be made solely from the leaf, and shall be unadulterated, sweet, and good.

III. The pork-barrels and ham-tierces shall be new and strong, made of well-seasoned white or burr oak, free from objectionable sap, thoroughly coopered, and bound with new, round, green hickory or white-oak hoops—bark on—covering not less than eleven-sixteenths ($\frac{11}{16}$) of the length of the barrel.

The bacon-boxes shall be new, made of sound, well-seasoned wood, free from knots, knot-holes, or checks, dressed on one side, one (1) inch thick, not over two (2) strips to each end, and three (3) strips to each side, bottom, or top—strips to be tongued and grooved together; with good, strong hard-wood, white-wood, or sap-pine stays inside each corner. They shall be well nailed, and bound around each end with oak or hickory straps—bark on—to lap three (3) inches on the cover.

The flour and bean sacks shall be new and strong, made of twilled cotton free from sizing, each sack covered with a new gunny or with gunny cloth; sacks and covers to be well sewed with strong new twine; all corners of package tied.

The hay-stacks shall be made at such points as, under the direction of his commanding officer, ——— shall designate, and at such distances apart that if one should be on fire the others will not be endangered thereby. The stacks shall be carefully rounded and topped off to shed rain, with tops properly secured by poles or weights (or both) against action of the wind. A space of ——— (———) yards around each stack shall be cleared of grass and brush.

The lard-cases shall be new, made of sound, well-seasoned wood, three-quarters ($\frac{3}{4}$) of an inch thick for sides, tops, and bottoms, and one (1) inch thick for ends, each case strapped at ends with hoop-iron, or with round, green, tough wooden hoops—bark on. The lard-tins shall be new, strong, square-shaped, and hermetically sealed.

All packages to be furnished under this contract shall have distinctly marked thereon the date of packing, the month and year in which delivered, the initials of the contracting officer, the name and place of business (city or town) of the contractor, the name, actual gross, tare, and net weights or quantity, of the article contained in the package at time of delivery, and the words "Subsistence Department, U. S. A."

"Sub. Dept., U. S. A." Upon pork-barrels, the packer's name and location, and the number of pieces and pounds of green meat in each barrel, must be branded on the head with a metallic brand, marking-iron, or stencil-brand, at the time of packing.

IV. All articles to be furnished under this contract shall be subject to inspection at any place or places of preparation, curing, and delivery, at such time or times, to such person or persons, and in such manner, as may be deemed necessary by _____. If there be a legal inspector of any such articles at such place or places, his inspection shall be availed

V. The said _____ shall receive for the subsistence supplies accepted from him hereunder the following prices (it being understood that all prices herein expressed are for the net weight of the articles specified), viz :

Beef, _____ (_____) dollars per barrel;
 Bacon, _____ (_____) cents per pound;
 Flour, _____ (_____) cents per pound;
 Beans, _____ (_____) cents per pound;
 Hay, _____ (_____) dollars per ton;
 Lard, _____ (_____) cents per pound;
 Tallow, _____ (_____) cents per pound;

To be paid by _____, as soon as practicable after acceptance of the supplies, in the full amount furnished for the purpose by the United States.

VI. Whenever in the opinion of _____ any article to be delivered or service to be performed hereunder is not of the kind stipulated for, he shall report the case to the commanding officer at _____, who shall thereupon immediately convene a board of officers, to consist of as many members, not exceeding three (3), as can be assembled. The board shall at once examine into the matter in question, and its finding shall be conclusive in regard thereto.

VII. In case of failure of the said _____ to deliver any article as herein stipulated, _____ is authorized to supply by purchase, in open market or otherwise, any deficiency resulting from such failure (the article so procured to be of the kind, package, mode of curing, &c., herein specified, as near as practicable), and the said _____ shall be reimbursed with any excess of cost over that of furnishing at contract price.

VIII. No member of or delegate to Congress, nor any person belonging to or employed in the military service of the United States, is or shall be admitted to any share or part in this contract, or to any benefit which may arise herefrom. [Here add to any contract made with an incorporated company, for its general benefit, the following words, to wit: "But this stipulation, so far as it relates to members of or delegates to Congress is to be construed to extend to this contract."—See sec. 3740, Revised Statutes.]

IX. This contract shall be subject to the approval of the Commissary General of Subsistence, U. S. A.

In witness whereof the undersigned have hereunto placed their hands and seals the day and date first hereinbefore written.

_____, [L. S.]
 _____,
 _____, [L. S.]

Witness:

Executed in quintuplicate.)

Approved: _____, 18—.

_____,
 _____ Commanding _____.

Approved: _____, 18—.

_____,
 _____ Commanding _____.

Here add, on the quintuplicate copy of contract intended for the Returns Office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

NOTE.—The foregoing "Form of contract for subsistence supplies" sets forth conditions of a formal written agreement by which the articles therein named may be contracted for under proper specifications. The variety or description of the articles and packages is taken arbitrarily by way of general example. Each particular case, however, must be controlled by circumstances and the mercantile rules of its locality. While certain features of this form apply to every contract in the military service, others are intended to suggest details which should be embodied in written agreements stipulating for supplies or services, so that, as far as practicable, the views of the contracting parties being fully expressed therein, misunderstandings shall not occur. [See rule as to signature by order.]

FORM OF CONTRACT FOR RATIONS FOR RECRUITS AND RECRUITING PARTIES.

Articles of agreement entered into this _____ day of _____, eighteen hundred and _____, between _____, _____, Regiment of _____, recruiting officer, an officer in the service of the United States of America, of the one part, and * _____, of _____, in the county of _____ and State of _____, of the other part.

This agreement witnesseth: That the said _____, for and on behalf of the United States of America, and the said _____, _____ heirs, executors, and administrators have mutually agreed, and by these presents do mutually covenant and agree, to and with each other, as follows, viz:

I. The said _____, _____ heirs, executors, and administrators, shall supply, and issue at _____, all the _____ rations, to consist of the articles hereinafter specified, that shall be required for the use of the United States recruiting-party and recruits stationed at the place aforesaid, commencing on the _____ day of _____, eighteen hundred and _____, and ending on the _____ day of _____, eighteen hundred and _____, or such earlier day as the Commissary General of Subsistence may direct, at the price of _____ cents and _____ mills for each complete _____ ration, in the funds provided by the United States for public disbursement.

II. That the ration to be furnished daily by virtue of this contract shall consist of the following articles and quantities, viz: twelve ounces of pork or bacon, or one pound and four ounces of fresh beef or fresh mutton, or one pound and six ounces of salt beef, or fourteen ounces of dried beef, or one pound two ounces of pickled or fresh fish; eighteen ounces of light bread or flour, or one pound of hard bread, or one pound and four ounces of corn meal; and to every one hundred rations, fifteen pounds of beans or pease, or ten pounds of rice or hominy; ten pounds of green coffee, or eight pounds of roasted (or roasted and ground) coffee, or two pounds of tea; fifteen pounds of sugar, or two gallons of molasses or sirup; four quarts of vinegar; one pound and four ounces of adamantine candles; four pounds of soap; four pounds of salt; and four ounces of pepper. Where two or more articles constitute, as equivalents, a component part of this ration, the recruiting officer shall have power to designate the proportion in which such articles shall be furnished. And it is understood and agreed that when cooked rations are to be furnished by the terms of this agreement, the above-specified quantities of adamantine candles and soap, and three substantial meals daily, equivalent to the other components of the ration above specified, shall constitute a complete ration.

III. That fresh beef or fresh mutton shall be issued four times in each week if required by the recruiting officer. The necks of the cattle slaughtered for beef to be delivered under this agreement shall be cut off at the fourth vertebral joint, and the breasts trimmed down. The shanks of fore quarters shall be cut off from three to four inches above the knee-joint, and of hind quarters from six to eight inches above the hock-joint.

IV. That the provisions to be furnished under this contract shall be of the first quality. Should any difficulty arise respecting their quality, then the recruiting officer shall appoint a disinterested person to meet one of the same description to be appointed by the contractor. These two shall have power to decide on the quality of the provisions; but should they disagree, then a third person shall be chosen by the two already appointed, the whole to act under oath, and the opinion of the majority to be final in the case.

V. That in case of deficiency in the quantity or quality of the rations herein stipulated to be furnished, then the recruiting officer at the place aforesaid shall have power to supply the deficiency by purchase, and the said _____, contractor, shall be charged with any excess of cost over that of furnishing rations at contract rates.

VI. That no member of or delegate to Congress, or any officer, agent, or person employed in the military service of the United States, shall be admitted to any share herein, or to any benefit which may arise herefrom.

VII. This contract shall be subject to the approval of the Commissary-General of Subsistence, U. S. A.

In witness whereof the undersigned have hereunto placed their hands and seals the day and date first above written.

_____, [L. S.]
 _____ Reg't of _____,
 Recruiting Officer.
 _____, [L. S.]
 _____, [L. S.]

Witnesses:

* When a firm is contracting, the full names of the individuals composing it will be stated in the contract, together with the firm-name or style of the copartnership.

† When this agreement is for cooked rations, the word "cooked" must be here inserted.

NOTES.—This contract is to be executed in *quintuplicate*—one copy to be kept by the contractor; one to be kept by the recruiting officer making the agreement; two to be sent to the Commissary General of Subsistence; one to be sent to the “returns office,” Department of the Interior, Washington, D. C.

Contracts covering periods prior to their date are inadmissible.

Alterations or interlineations must be specifically stated and described at the foot of the contract over the signatures of parties. Erasures are inadmissible.

The signature of each of the parties to the contract must be attested by the signature of one or more witnesses.

6. In framing the stipulations of a contract for the preparation, curing, packing, and delivery of subsistence supplies, care will be taken that in nature, quality, quantity, package, &c., the supplies are adapted to the kind and extent of the transportation to which they are to be subjected; the climate to which they are to be exposed; the character of shelter they are to have; the length of time they are to be kept; the use for which they are intended; the number of troops to be supplied; and any other circumstances or conditions which may be anticipated.

7. When time or special circumstances do not allow terms of purchase agreed upon to be reduced to writing, all features of the forms prescribed that it may be practicable to observe and fulfill, as conditions of the purchase, must be understood and agreed by the seller. Temporary agreements for subsisting recruiting and other small parties may be made without advertising in newspapers, but only to run for such time as is necessary in order to advertise and make formal contracts under the law and regulations. It should be a condition in the advertisement and in the information to bidders, that the cooked rations or subsistence shall be furnished at places convenient to the recruiting stations.

VII.—ENGINEER DEPARTMENT.

FORM OF CONTRACT.

Articles of agreement entered into this — day of —, eighteen hundred and —, between —, Corps of Engineers, U. S. A., of the first part, and — and —, partners, doing business under the firm name of —, of —, of the county of —, State of —, of the second part.

This agreement witnesseth: That in conformity with the advertisement and specifications hereunto attached, and which form a part of this contract, the said —, for and in behalf of the United States of America, and the said —, for —, heirs, executors, and administrators, have mutually agreed, and by these presents do mutually covenant and agree, to and with each other as follows, viz:

[Here, in such number of separate paragraphs or articles as may be necessary, specify the kind of work to be constructed, or materials to be furnished, or services to be rendered.]

All materials furnished and work done under this contract shall, before being accepted, be subject to a rigid inspection by an inspector appointed on the part of the government, and such as — not conform to the specifications set forth in this contract shall be rejected. The decision of the engineer officer in charge as to quality and quantity shall be final.

The said — shall commence — on or before the — day of —, eighteen hundred and —, and shall complete the — on or before the — day of —, eighteen hundred and —.

If, in any event, the party of the second part shall delay or fail to commence with the delivery of the material or the performance of the work on the day specified herein, or shall, in the judgment of the engineer in charge, fail to prosecute faithfully and diligently the work in accordance with the specifications and requirements of this contract, then, in either case, the party of the first part, or his successor legally appointed, shall have power, with the sanction of the Chief of Engineers, to annul this contract, by giving notice in writing to that effect to the party (or parties, or either of them) of the second part; and, upon the giving of such notice, all money or reserved percentage due or to become due to the party or parties of the second part by reason of this contract shall be and become forfeited to the United States; and the party of the first part shall be thereupon authorized, if an immediate performance of the work or delivery of the materials be in his opinion required by the public exigency, to proceed to provide for the same by open purchase or contract, as prescribed in section 3709 of the Revised Statutes of the United States: *Provided, however*, That if the party (or parties) of the second part shall by freshets, ice, or other force or violence of the elements, and by no fault of his or their own, be prevented either from commencing or completing the work, or delivering the materials at the time agreed upon in this contract, such additional time may, in writing, be allowed him or them for such commencement or completion as, in the judgment of the party of the first part or his successor, shall be just and reasonable; but such allowance and extension shall in no manner affect the rights

or obligations of the parties under this contract, but the same shall subsist, take effect, and be enforceable precisely as if the new date for such commencement or completion had been the date originally herein agreed upon.

If at any time during the prosecution of the work it be found advantageous or necessary to make any change or modification in the project, and this change or modification should involve such change in the specifications as to character and quantity, whether of labor or material, as would either increase or diminish the cost of the work, then such change or modification must be agreed upon in writing by the contracting parties, the agreement setting forth fully the reasons for such change, and giving clearly the quantities and prices of both material and labor thus substituted for those named in the original contract, and before taking effect must be approved by the Secretary of War: *Provided*, That no payment shall be made unless such supplemental or modified agreement was signed and approved before the obligation arising from such modification was incurred.

No claim whatever shall at any time be made upon the United States by the party or parties of the second part, for or on account of any extra work or material performed or furnished, or alleged to have been performed or furnished, under or by virtue of this contract, and not expressly bargained for and specifically included therein, unless such extra work or materials shall have been expressly required in writing by the party of the first part or his successor, the prices and quantities thereof having been first agreed upon by the contracting parties and approved by the Chief of Engineers.

Payments shall be made to the said _____ when the _____ contracted for shall have been delivered and accepted, reserving _____ per cent. from each payment until the whole _____ shall have been so delivered and accepted.

Neither this contract nor any interest therein shall be transferred by the said _____ to any other party; and any such transfer shall cause the annulment of the contract so far as the United States are concerned. All rights of action, however, to recover for any breach of this contract by the said _____ are reserved to the United States.

No member of or delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom. [Here add, to any contract made with an incorporated company for its general benefit, the following words, viz: "But this stipulation, so far as it relates to members of or delegates to Congress, is not to be construed to extend to this contract."—See sec. 3740, Revised Statutes.]

This contract is to be subject to approval of _____.

In witness whereof the undersigned have hereunto placed their hands and seals the date first hereinbefore written.

_____. [L. S.]

_____. [L. S.]

Witnesses:

_____.
_____.

(Executed in quintuplicate.)

Approved: _____, 18—.

_____,
_____ Commanding _____.
_____.
_____.

Approved: _____, 18—.

_____,
_____ Commanding _____.
_____.
_____.

[Here add on the quintuplicate copy of contract intended for the returns office, Department of the Interior, the affidavit thereupon required. For form of such affidavit see page 19.]

VIII.—ORDNANCE DEPARTMENT.

FORM OF CONTRACT.

Articles of agreement entered into this _____ day of _____, eighteen hundred and _____, between _____, of the county of _____, State of _____, of the first part, and the United States, by _____, subject to the approval of the Chief of Ordnance (acting under the direction and by authority of the Secretary of War), for and in their behalf, of the second part.

ement witnesseth: That the said _____, for _____, _____ heirs, executors, administrators, and the said _____, for and in behalf of the United States of _____ have mutually agreed, and by these presents do mutually covenant and bind with each other, as follows, viz:

a such number of separate paragraphs or articles as may be necessary, of kinds and quantities of supplies or materials to be furnished, or the nature of services to be performed.]

_____ shall be packed by the party of the first part, if required, in good strong boxes of an approved pattern _____, for which a fair price, to be determined by the United States inspector, will be allowed.

_____ shall be delivered by the said party of the first part at _____. The party of the first part shall indemnify the United States and all persons liable to them for all liability on account of any patent rights granted by the United States which may affect the _____ herein contracted for.

_____ herein contracted for, which shall be delivered, inspected, and approved by the United States inspectors, there shall be paid by _____ to the said _____, _____ heirs, executors, administrators, on bills in triplicate, made in approved form, and duly authenticated by the proper officers of the Ordnance Department, the sum of _____ dollars, in full for the purpose by the United States.

_____ for each delivery, as hereinafter provided, shall be made on certificates of inspection and receipts by the United States inspectors, at the rate of _____.

_____ default shall be made by the party of the first part in delivering all or any _____ mentioned in this contract, of the quality and at the times and places specified, then, in that case, _____. Nothing contained in this stipulation shall be construed to prevent the Chief of Ordnance, at his option, upon the happening of such default, from declaring this contract to be thereafter null and void, without affecting the right of the United States to recover for defaults which may hereafter occur; but in case of overwhelming and unforeseen accident, by fire or other circumstances shall be taken into equitable consideration by the United States, and no claim for forfeiture for non-delivery at the time specified.

This contract nor any interest therein shall be transferred by the said _____ or party; and any such transfer shall cause the annulment of the contract if the United States are concerned. All rights of action, however, to recover for breach of this contract by the said _____ are reserved to the United States. No member of or delegate to Congress, nor any person belonging to or employed in the military service of the United States, is or shall be admitted to any share or interest in this contract, or to any benefit which may arise herefrom. [Here add, to any contract made with an incorporated company for its general benefit, the following stipulation: "But this stipulation, so far as it relates to members of or delegates to Congress, shall not be construed to extend to this contract."—See section 3740 Rev.

This contract shall be subject to the approval of the Chief of Ordnance, United States Army.

_____. [L. S.]
_____.
_____. [L. S.]

s:
_____.
_____.

l:
_____.
_____ Commanding.
_____.
_____.

l:
_____.
_____ Commanding.
_____.
_____.

d in quintuplicate.)
d, on the quintuplicate copy of contract intended for the returns office, Department of the Interior, the affidavit thereupon required. For form of such affidavit, see page 19.]

PROVISIONS OF THE REVISED STATUTES, AND ACTS AND PARTS OF ACTS OF CONGRESS, RELATING TO CONTRACTS UNDER THE WAR DEPARTMENT.

The transportation of troops, munitions of war, equipments, military stores, throughout the United States, shall be under the immediate supervision of the Secretary of War and such agents as he may appoint.

SEC. 220. The Secretary of War shall lay before Congress, at the commencement of each regular session, a statement of all contracts for supplies or services which have been made by him or under his direction during the year preceding, and also a statement of the expenditure of the moneys appropriated for the contingent expenses of the military establishment.

SEC. 1133. It shall be the duty of the officers of the Quartermaster's Department, under the direction of the Secretary of War, to purchase and distribute to the Army all military stores and supplies, requisite for its use, which other corps are not directed by law to provide; to furnish means of transportation for the Army, its military stores, and supplies, and to provide for and pay all incidental expenses of the military service which other corps are not directed to provide for and pay.

SEC. 1134. No officer belonging to the Quartermaster's Department, or doing the duty of a quartermaster or assistant quartermaster, shall be concerned, directly or indirectly, in the purchase or sale of any article intended for or appertaining to said department of service, except on account of the United States; nor shall any such officer take or apply to his own use any gain or emolument for negotiating or transacting any business connected with the duties of his office, other than that which may be allowed by law.

SEC. 1141. It shall be the duty of the officers of the Subsistence Department, under the direction of the Secretary of War, to purchase and issue to the Army such supplies as enter into the composition of the ration.

SEC. 1150. No officer belonging to the Subsistence Department, or doing the duty of a subsistence officer, shall be concerned, directly or indirectly, in the purchase or sale of any article entering into the composition of the ration allowed to troops in the service of the United States, or of any article designated by the inspectors-general of the Army, and furnished for sale to officers and enlisted men at cost prices, or of tobacco furnished for sale to enlisted men, except on account of the United States; nor shall any such officer take or apply to his own use any gain or emolument for negotiating or transacting any business connected with the duties of his office, other than that which may be allowed by law.

SEC. 1164. It shall be the duty of the Chief of Ordnance to furnish estimates, and, under the direction of the Secretary of War, to make contracts and purchases, for procuring the necessary supplies of ordnance and ordnance stores, for the use of the armies of the United States; to direct the inspection and proving of the same, and to direct the construction of all cannon and carriages, ammunition-wagons, traveling forges, artificers' wagons, and of every implement and apparatus for ordnance, and the preparation of all kinds of ammunition and ordnance stores constructed or prepared for said service.

SEC. 1358. No officer of the prison, or other person connected therewith, shall be concerned or interested, directly or indirectly, in any contract, purchase, or sale made on account of the prison.

SEC. 1781. Every member of Congress, or any officer or agent of the government who, directly or indirectly, takes, receives, or agrees to receive, any money, property, or other valuable consideration whatever, from any person for procuring, or aiding to procure, any contract, office, or place, from the government or any department thereof, or from any officer of the United States, for any person whatever, or for giving any such contract, office, or place to any person whomsoever; and every person who, directly or indirectly, offers or agrees to give, or gives, or bestows any money, property, or other valuable consideration whatever, for the procuring, or aiding to procure, any such contract, office, or place, and every member of Congress who, directly or indirectly, takes, receives, or agrees to receive any money, property, or other valuable consideration whatever after his election as such member, for his attention to, services, action, vote, or decision on any question, matter, cause, or proceeding which may then be pending, or may by law or under the Constitution be brought before him in his official capacity, or in his place as such member of Congress, shall be deemed guilty of a misdemeanor, and shall be imprisoned not more than two years and fined not more than ten thousand dollars. And any such contract or agreement may, at the option of the President, be declared absolutely null and void; and any member of Congress or officer convicted of a violation of this section shall, moreover, be disqualified from holding any office of honor, profit, or trust under the Government of the United States.

SEC. 1782. No Senator, Representative, or Delegate, after his election and during his continuance in office, and no head of a department, or other officer or clerk in the employ of the government, shall receive or agree to receive any compensation whatever, directly or indirectly, for any services rendered, or to be rendered, to any person, either by himself or another, in relation to any proceeding, contract, claim, controversy, charge, accusation, arrest, or other matter or thing in which the United States is a party, or directly or indirectly interested, before any department, court-martial, bureau, officer, or any civil, military, or naval commission whatever. Every person offending against this section shall be deemed guilty of a misdemeanor, and shall be imprisoned not more than two years, and fined not more than ten thousand dollars, and shall, moreover, by conviction therefor, be rendered forever thereafter incapable of holding any office of honor, trust, or profit under the Government of the United States.

SEC. 1977. All persons within the jurisdiction of the United States shall have the same right in every State and Territory to make and enforce contracts, to sue, be parties, give evidence, and to the full and equal benefit of all laws and proceedings for the security of persons and property as is enjoyed by white citizens, and shall be subject to like punishment, pains, penalties, taxes, licenses, and exactions of every kind, and to no other.

SEC. 3648. No advance of public money shall be made in any case whatever. And in all cases of contracts for the performance of any service, or the delivery of articles of any description, for the use of the United States, payment shall not exceed the value of the service rendered, or of the articles delivered previously to such payment. It shall, however, be lawful, under the special direction of the President, to make such advances to the disbursing officers of the government as may be necessary to the faithful and prompt discharge of their respective duties, and to the fulfillment of the public engagements. The President may also direct such advances as he may deem necessary and proper, to persons in the military and naval service employed on distant stations, where the discharge of the pay and emoluments to which they may be entitled cannot be regularly effected.

SEC. 3678. All sums appropriated for the various branches of expenditure in the public service shall be applied solely to the objects for which they are respectively made, and for no others.

SEC. 3679. No department of the government shall expend, in any one fiscal year, any sum in excess of appropriations made by Congress for that fiscal year, or involve the government in any contract for the future payment of money in excess of such appropriations.

SEC. 3690. All balances of appropriations contained in the annual appropriation bills and made specifically for the service of any fiscal year, and remaining unexpended at the expiration of such fiscal year, shall only be applied to the payment of expenses properly incurred during that year, or to the fulfillment of contracts properly made within that year; and balances not needed for such purposes shall be carried to the surplus fund. This section, however, shall not apply to appropriations known as permanent or indefinite appropriations.

SEC. 3709. All purchases and contracts for supplies or services, in any of the departments of the government, except for personal services, shall be made by advertising sufficient time previously for proposals respecting the same, when the public exigencies do not require the immediate delivery of the articles, or performance of the service. When immediate delivery or performance is required by the public exigency, the articles or service required may be procured by open purchase or contract, at the places and in the manner in which such articles are usually bought and sold, or such services engaged, between individuals.

SEC. 3710. Whenever proposals for supplies have been solicited, the parties responding to such solicitation shall be duly notified of the time and place of opening the bids, and be permitted to be present either in person or by attorney, and a record of each bid shall then and there be made.

SEC. 3711. It shall not be lawful for any officer or person in the civil, military, or naval service of the United States in the District of Columbia to purchase anthracite or bituminous coal or wood for the public service except on condition that the same shall, before delivery, be inspected and weighed or measured by some competent person to be appointed by the head of the department or chief of the branch of the service in which the purchase is made. The person so appointed shall, before entering upon the duty of inspector, weigher, and measurer, and to the satisfaction of the appointing officer, give bonds with not less than two sureties, in the penal sum of five thousand dollars, and with condition that each ton of coal weighed by him shall consist of two thousand two hundred and forty pounds, and that each cord of wood to be so measured shall be of the standard measure of one hundred and twenty-eight cubic feet. The inspector, weigher, and measurer so appointed shall be entitled to receive from the owners of fuel weighed and measured by him twenty cents for each ton of coal weighed, and nine cents for each cord of wood measured by him. Each load or parcel of wood or coal weighed and measured by him shall be accompanied by his certificate of the number of tons or pounds of coal and the number of cords or parts of cords of wood in each load or parcel.

SEC. 3713. It shall not be lawful for any accounting officer to pass or allow to the credit of any disbursing officer in the District of Columbia any money paid by him for purchase of anthracite or bituminous coal or for wood, unless the voucher therefor is accompanied by a certificate of the proper inspector, weigher, and measurer that the quantity paid for has been determined by such officer.

SEC. 3714. All purchases and contracts for supplies or services for the military and naval service shall be made by or under the direction of the chief officers of the Departments of War and of the Navy, respectively. And all agents or contractors for supplies or services as aforesaid shall render their accounts for settlement to the accountant of the proper department for which such supplies or services are required,

subject, nevertheless, to the inspection and revision of the officers of the Treasury *in* the manner before prescribed.

SEC. 3715. Contracts for subsistence supplies for the Army, made by the Commissary General, on public notice, shall provide for a complete delivery of such articles, on inspection, at such places as shall be stipulated.

SEC. 3716. The Quartermaster's Department of the Army, in obtaining supplies for the military service, shall state in all advertisements for bids for contracts that a preference shall be given to articles of domestic production and manufacture, conditions of price and quality being equal, and that such preference shall be given to articles of American production and manufacture produced on the Pacific coast, to the extent of the consumption required by the public service there. In advertising for Army supplies the Quartermaster's Department shall require all articles which are to be used in the States and Territories of the Pacific coast to be delivered and inspected at points designated in those States and Territories; and the advertisements for such supplies shall be published in newspapers of the cities of San Francisco, in California, and Portland, in Oregon.

SEC. 3717. Whenever the Secretary of War invites proposals for any works, or for any material or labor for any works, there shall be separate proposals and separate contracts for each work, and also for each class of material or labor for each work.

SEC. 3729. The Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury may enter into contract, in open market, for hunting of American manufacture, as their respective services require, for a period not exceeding one year, and at a price not exceeding that at which an article of equal quality can be imported.

SEC. 3731. Every person who shall furnish supplies of any kind to the Army or Navy shall be required to mark and distinguish the same with the name of the contractor furnishing such supplies, in such manner as the Secretary of War and the Secretary of the Navy may, respectively, direct; and no supplies of any kind shall be received unless so marked and distinguished.

SEC. 3732. No contract or purchase on behalf of the United States shall be made, unless the same is authorized by law or is under an appropriation adequate to its fulfillment, except in the War and Navy Departments, for clothing, subsistence, forage, fuel, quarters, or transportation, which, however, shall not exceed the necessities of the current year.

SEC. 3733. No contract shall be entered into for the erection, repair, or furnishing of any public building, or for any public improvement which shall bind the government to pay a larger sum of money than the amount in the Treasury appropriated for the specific purpose.

SEC. 3735. It shall not be lawful for any of the Executive Departments to make contracts for stationery or other supplies for a longer term than one year from the time the contract is made.

SEC. 3737. No contract or order, or any interest therein, shall be transferred by the party to whom such contract or order is given to any other party, and any such transfer shall cause the annulment of the contract or order transferred, so far as the United States are concerned. All rights of action, however, for any breach of such contract by the contracting parties, are reserved to the United States.

SEC. 3739. No member of or delegate to Congress shall directly or indirectly, himself, or by any other person in trust for him, or for his use or benefit, or on his account, undertake, execute, hold, or enjoy, in whole or in part, any contract or agreement made or entered into in behalf of the United States, by any officer or person authorized to make contracts on behalf of the United States. Every person who violates this section shall be deemed guilty of a misdemeanor, and shall be fined three thousand dollars. All contracts or agreements made in violation of this section shall be void; and whenever any sum of money is advanced on the part of the United States, in consideration of any such contract or agreement, it shall be forthwith repaid; and in case of refusal or delay to repay the same, when demanded, by the proper officer of the department under whose authority such contract or agreement shall have been made or entered into, every person so refusing or delaying, together with his surety or sureties, shall be forthwith prosecuted at law for the recovery of any such sum of money so advanced.

SEC. 3740. Nothing contained in the preceding section shall extend, or be construed to extend, to any contract or agreement, made or entered into, or accepted, by any incorporated company, where such contract or agreement is made for the general benefit of such incorporation or company; nor to the purchase or sale of bills of exchange or other property by any member of Congress, where the same are ready for delivery, and payment therefor is made, at the time of making or entering into the contract or agreement.

SEC. 3741. In every such contract or agreement to be made or entered into, or accepted by or on behalf of the United States, there shall be inserted an express condition that no member of or delegate to Congress shall be admitted to any share or part of such contract or agreement, or to any benefit to arise thereupon.

742. Every officer who on behalf [of] the United States, directly or indirectly enters into any contract, bargain, or agreement in writing or otherwise, other than as are hereinbefore excepted, with any member of or delegate to Congress, shall be deemed guilty of a misdemeanor, and shall be fined three thousand dollars.

743. All contracts to be made by virtue of any law, and requiring the advance of money, or in any manner connected with the settlement of public accounts, shall be made in the office of the First Comptroller of the Treasury of the United States, or the Comptroller of the Treasury of the United States, or the Commissioner of the General Land Office, respectively, according to the nature thereof, within ninety days after their respective dates.

744. It shall be the duty of the Secretary of War, of the Secretary of the Navy, of the Secretary of the Interior to cause and require every contract made by them or on behalf of the government, or by their officers under them appointed to make such contracts, to be reduced to writing, and signed by the contracting parties in their names at the end thereof; a copy of which shall be filed by the officer making the contract in the returns office of the Department of the Interior, as soon as the contract is made as possible, and within thirty days, together with all orders, and proposals to him made by persons to obtain the same, and with a copy of the advertisement he may have published inviting bids, offers, or proposals for the same. All the copies and papers in relation to each contract shall be attached together with the original, and sealed, and marked by numbers in regular order, according to the numbers composing the whole return.

745. It shall be the further duty of the officer, before making his return, according to the preceding section, to affix to the same his affidavit in the following form, to be sworn before some magistrate having authority to administer oaths: "I do solemnly swear (or affirm) that the copy of contract hereto annexed is an exact copy of a contract made by me personally with ———; that I made the same fairly without any fraud or advantage to myself, or allowing any such benefit or advantage corruptly to be obtained by ———, or any other person; and that the papers accompanying include all the papers relating to the said contract, as required by the statute in such case made and provided."

746. Every officer who makes any contract, and fails or neglects to make returns thereon as required by the preceding sections, shall be deemed guilty of a misdemeanor, and shall be fined not less than one hundred dollars nor more than five hundred dollars, and imprisoned not more than six months.

747. It shall be the duty of the Secretary of War, of the Secretary of the Navy, of the Secretary of the Interior, to furnish every officer appointed by them with authority to make contracts on behalf of the government, with a printed letter of instructions, setting forth the duties of such officer, under the two preceding sections, and to furnish therewith forms, printed in blank, of contracts to be made, and of returns required to be affixed thereto, so that all the instruments may be as nearly uniform as possible.

326. All advertisements, notices, and proposals for contracts for all the Executive Departments of the government, and the laws passed by Congress and executive proclamations and treaties to be published in the District of Columbia, Maryland, and Virginia, shall hereafter be advertised by publication in the three daily papers published in the District of Columbia having the largest circulation, one of which shall be selected by the Clerk of the House of Representatives, and in no others. The compensation for such publications shall not be higher than such as are paid by individuals for advertising in said papers, and the same publication shall be made in each of the three papers equally as to frequency: *Provided*, That no advertisement to any State, Territory, or District, other than the District of Columbia, Maryland, or Virginia, shall be published in the papers designated, unless at the direction first made of the proper Executive Department: *And provided further*, That this section shall not be construed to require a greater compensation for the publication of the laws passed by Congress and executive proclamations and treaties in the papers of the District of Columbia than is provided by law for such publications in other papers.

328. No advertisement, notice, or proposal for any Executive Department of the government, or for any bureau thereof, or for any office therewith connected, shall be published in any newspaper whatever, except in pursuance of a written authority from the head of such department; and no bill for any such advertisement, or publication, shall be paid, unless there be presented, with such a bill, a copy of such written authority.

503. Every officer of the government who knowingly contracts for the erection, or furnishing of any public building, or for any public improvement, to pay a sum in excess of the specific sum appropriated for such purpose, shall be punished by imprisonment not less than six months nor more than two years, and shall pay a fine of not more than five thousand dollars.

(Extract from act approved March 3, 1875.)

SEC. 2. That in all contracts for material for any public improvement, the Secretary of War shall give preference to American material; and all labor thereon shall be performed within the jurisdiction of the United States.

(Act approved April 10, 1878.)

That the Secretary of War is hereby authorized to prescribe rules and regulations to be observed in the preparation and submission and opening of bids for contracts under the War Department; and he may require any bid to be accompanied by a bond in such penal sum as he may deem advisable, with good and sufficient security, conditioned that the bidder will enter into a contract agreeably to the terms of his bid, if the same be awarded to him within sixty days from the date of the opening of the bids, or otherwise pay the penalty. No bid shall be withdrawn by the bidder within the said period of sixty days.

(Extract from act approved July 31, 1876, page 105, Statutes at Large.)

In no case of advertisement for contracts for the public service shall the same be published in any newspaper published and printed in the District of Columbia, unless the supplies or labor covered by such advertisement are to be furnished or performed in said District of Columbia.

(Extract from act approved June 20, 1878.)

That hereafter, all advertisements, notices, proposals for contracts, and all forms of advertising required by law for the several departments of the government, may be paid for at a price not to exceed the commercial rates charged to private individuals, with the usual discounts; such rates to be ascertained from sworn statements to be furnished by the proprietors or publishers of the newspapers proposing so to advertise: *Provided*, That all advertising in newspapers since the tenth day of April, eighteen hundred and seventy-seven, shall be audited and paid at like rates; but the heads of the several departments may secure lower terms at special rates whenever the public interest requires it.

X.—DECISIONS OF COURTS AND OPINIONS OF ATTORNEYS-GENERAL, &c.

A contract will not be awarded to a corporation until it shall furnish satisfactory evidence of its legal capacity to enter into the same. (See XI Opinions of Attorneys-General, 247.)

Except as specified in section 3732, Revised Statutes, no contract or purchase can legally be made unless expressly authorized by statute, or inferentially by an appropriation being made which properly requires the same. (R. S., sec. 3732; the Floyd Acceptances, 7 Wallace, 684.)

A contract made under an appropriation for a certain fiscal year cannot legally operate or extend beyond that fiscal year. (R. S., sec. 3679; IV Opinions, 476.)

A contract stipulating for the payment of an amount beyond the amount of the appropriation under which it is made is void and inoperative as to the payment of the excess over the appropriation. (R. S., sec. 3732; IX Opinions, 18; IV *ib.*, 600; *Curtis v. United States*, 2 Ct. Cl., 11.)

All contracts must be in writing, and an unwritten contract is, as such, void and inoperative. (*Clark v. United States*, 5 Otto, 539; *Henderson v. United States*, 4 Ct. Cl., 75; *Lindsley v. United States*, *ib.*, 359; *Donalds v. United States*, 5 *ib.*, 70; *Grant v. United States*, *ib.*, 83; *Lender v. United States*, 7 *ib.*, 530; *Jones v. United States*, 11 *ib.*, 711; XIV Opinions, 27.) But to this general rule an exception exists in a case of a contract made without advertising, because of a public exigency such as contemplated in Revised Statutes, section 3709. Such a contract is not required to be in writing. (*Cobb v. United States*, 7 Ct. Cl., 470; *Thompson v. United States*, 9 *ib.*, 187.)

After a contract has been duly executed, the United States can impose no condition upon the contractor further or other than as stipulated in the contract. (X Opinions, 371; and see V *ib.*, 29; IX *ib.*, 342; XII *ib.*, 542.)

A contract once duly executed cannot be rescinded, extended, or in any respect modified, except, in a proper case, by the authority of the Secretary of War. (See IV Opinions, 331; IX *ib.*, 342; X *ib.*, 424, 480.)

A contract transferred, or any interest in which is transferred, in violation of section 3732, Revised Statutes, is wholly annulled as to any rights or remedies of the contractor under it. The assignment passes no title, legal or equitable; neither assignor

for assignee can enforce it as against the United States; and no action of an officer of the United States can restore validity or efficacy to it. (*Wheeler v. United States*, 5 Ct. Cl., 504; *Wanless v. United States*, 6 *ib.*, 123; *McCord v. United States*, 9 *ib.*, 156; *Francis v. United States*, 11 *ib.*, 638; X Opinions 523.)

The term "*public exigency*," employed in section 3709, Revised Statutes, refers to an exceptional and urgent necessity, requiring an immediate supply of articles for military use, or the immediate performance of work or service, such as may grow out of the pressure of an existing state of war, rebellion, or insurrection, or of some particular act of warfare on the part of an enemy, or may be occasioned by an unexpected movement of troops; or such as may consist in the destruction or loss of supplies, structures, &c., by fire or the violence of the elements, by acts of rioters or trespassers, by theft or waste, by the negligence of common carriers or others, by the failure of contractors, &c. (See II Opinions, 257; III *ib.*, 437; X *ib.*, 28.)

Exigencies are sometimes assumed to exist where none have legitimately occurred. By carefully observing the laws regulating contracts, and making prompt provision for the future supplies, &c., of the command, recourse to purchases in open market to meet supposed emergencies may ordinarily be avoided. Information can generally be derived from the proper records as to the average quantity of supplies required in years past, which will provide against the happening of such emergencies; and timely advertisements should be made accordingly.

But that statute (the act of March 2, 1861), while requiring such advertisement as a general rule, invests the officer charged with the duty of procuring supplies with a discretion to dispense with advertising, if the exigencies of the public service require immediate delivery or performance.

It is too well settled to admit of dispute at this day, that where there is a discretion of this kind conferred on an officer, or board of officers, and a contract is made in which they have exercised that discretion, the validity of the contract cannot be made to depend on the degree of wisdom or skill which may have accompanied its exercise. (*United States v. Speed*, 8 Wallace, 83.)

The term "*personal services*," employed in section 3709, Revised Statutes, means services which are contracted for because of some special confidence reposed in the person who is to render them, based upon his supposed peculiar fitness as an expert, and irrespective generally of his pecuniary resources; such, for instance as the services of a civil engineer or surveyor, a lawyer or surgeon, a telegraph operator, &c. (See X Opinions, 5, 261.)

No person belonging to, or employed in, the military service of the United States shall, in behalf of the United States, purchase from any other such person, or make any contract with such person to furnish supplies or services; nor make any purchase or contract in which such person shall be admitted to any share or part, or to any benefit to arise therefrom. (See *Burns's Case*, 4 Ct. Cl., 113; *ib.*, 12 Wallace, 246.)

No person belonging to, or employed in, the military service of the United States shall be pecuniarily interested, directly or indirectly, in the purchase or sale, on behalf of the United States, of any article appertaining to such service; nor shall take, receive, or apply to his own use, any gain or emolument, under the guise of presents or otherwise, for negotiating or transacting any public business, other than what is or may be allowed by law.

All provisions contained in regulations or orders inconsistent with this regulation are superseded and revoked.

By command of General Sherman:

E. D. TOWNSEND,
Adjutant-General.

[General Orders, No. 62.]

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, August 17, 1880.

The Secretary of War directs that the following amendment be made in the form of contractor's bond prescribed on page 20 of General Orders No. 40, of 1880, from this office:

After the words "according to the true intent and meaning of the said contract," insert the words "and as well during any period of extension of said contract that may be granted on the part of the United States as during the original term of the same."

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

[General Orders, No. 67.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
Washington, September 21, 1880.

By direction of the Secretary of War, section IV (page 20) of General Orders No. 40, May 22, 1880, from this office, is amended so as to provide that the execution of bonds may be waived where the contract involves no greater sum than five hundred dollars in value.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

[General Orders, No. 33.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
Washington, March 25, 1881.

By direction of the Secretary of War Article VIII of form for wagon transportation contract prescribed in General Orders, No. 40, of 1880, from this office, is amended to read as follows:

VIII. Upon the completion of the loading of the train, bills of lading of that date shall be signed by the said ———, or ——— authorized agent, and the stores so receipted for shall be transported without delay, by the most direct route, to their destination, and there delivered, in good order and condition, to the officer or agent of the quartermaster's department authorized to receive them. Such transportation shall be effected within a reasonable time after the completion of the loading of the train, as fixed by the date of the bill of lading, not exceeding ——— days per one hundred miles for horse and mule trains required under the provisions of Article III of this agreement, nor ——— days per one hundred miles for all other trains, unless a longer time be authorized in writing by the forwarding officer prior to the commencement of or during the journey (but not after its completion), or unless detained by orders *en route*, which must be produced, and the said party of the second part shall be charged, for any delay beyond the time specified, at the rate of ten (10) cents *per diem* for each and every one hundred (100) pounds of freight in the train for each and every day of delay, unless, in the judgment of a board of survey whose proceedings and findings are duly approved and confirmed by the proper authority, such delay arises from causes beyond the control of the contractor.

The proceedings and findings of the board of survey will be subject to the approval and confirmation of the commanding officer under whose direction the contracting officer may be serving.

In cases where the contracts are for transportation at general depots of the quartermaster's department, independent posts and arsenals, not under the orders of a department commander, the proceedings and findings of the board of survey will be subject to the approval and confirmation of the Quartermaster-General.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

[General Orders, No. 63.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
Washington, July 14, 1881.

The following order from the War Department is published for the information and guidance of all concerned:

As in determining questions of good faith and validity of proposals for contracts for supplies or services much sometimes depends upon a postmark or other data, the envelopes in which such papers are received should—under the last clause of paragraph 5, General Orders, No. 40, of 1880, from this office (paragraph 1481, Codified Regulations)—be carefully preserved and filed with the proposals or other papers they contained.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

L.

SPECIFICATIONS FOR AMBULANCE WAGON FOR U. S. ARMY USE, COMPLETE, (INCLUDING TWO (2) HAND STRETCHERS.)

[Prepared by Board of Officers convened in Washington, D. C., by par. 4, S. O., No. 44, War Department, A. G. O., dated March 16, 1875 (organization modified by subsequent orders), and approved by the Secretary of War, October 31, 1877, as subsequently modified and altered after trial in actual use, and approved and adopted by the Secretary of War, May 25, 1881.]

BODY.

Main sills.

Main sills, two, 11 feet $1\frac{1}{4}$ inches extreme length, (including $11\frac{1}{4}$ inches projection for toe-board, and 1 inch finish outside of tail-gate), $1\frac{1}{2}$ inches wide, $2\frac{1}{4}$ inches deep, each sill to have on inside 4 inches from back end, an iron strap loop into which is fastened a leather loop $6\frac{1}{2}$ inches long, $\frac{7}{8}$ inch wide, and rounded to pass under handle of stretcher.

Cross bars.

Cross bars, three, mortised $1\frac{1}{4}$ inches into main sill. The front bar to be $2\frac{1}{4}$ inches wide, $2\frac{1}{4}$ inches deep, and framed into main sill $11\frac{1}{4}$ inches from the front end. The back bar, 3 inches wide, $1\frac{1}{2}$ inches deep, to be framed into main sill 3 feet $4\frac{1}{2}$ inches from the front bar, out to out. The center bar 3 inches by $1\frac{1}{2}$ inches, framed into main sill equally distant between front and back bars, and flush on bottom.

Bottom sills.

Bottom sills, two, 6 feet $11\frac{1}{4}$ inches long, 3 inches wide, $1\frac{1}{2}$ inches deep, mortised to receive seven studs each; the studs 1 inch by $1\frac{1}{4}$ inches, and $9\frac{7}{8}$ inches long between the shoulders, with $\frac{7}{8}$ inch by width of stud tenons on upper end, and $\frac{7}{8}$ inch by width of stud tenons on lower end, so as to give a drop of 11 inches below bottom of main sill.

Cross bars.

Cross bars framed into lower sill, five. The front bar to have a $\frac{1}{4}$ inch curve toward the back, and an iron plate $\frac{3}{4}$ inch wide and $\frac{1}{4}$ inch thick screwed on front edge its full length, the screws to be $\frac{3}{4}$ inch No. 10, and to be set 4 inches apart. The front bar mortised to receive four studs of same dimensions as those described for sides, passing through upper back bar forming front of drop or lower part of body; to be 3 inches wide, $1\frac{1}{2}$ inches deep. The back bar of lower sill, $2\frac{1}{4}$ inches deep, $1\frac{1}{2}$ inches wide, to project $4\frac{1}{2}$ inches on either side of the body and be mortised to receive ends of lower sills. The three other bars to be framed into lower sill equal distance apart as in drawings. Width of body, 4 feet $2\frac{1}{4}$ inches out to out, and 3 feet 11 inches in the clear, inside.

Panels.

Side panels of lower part of body to be of best yellow poplar, $9\frac{7}{8}$ inches deep, 6 feet $10\frac{1}{4}$ inches long, $\frac{1}{2}$ inch thick, screwed to inside of studs.

Tail-gate.

Tail-gate.—The length to be same as the inside width of the body, and to comprise an oak frame with upper and lower rails 1 inch deep and $1\frac{1}{4}$ inches wide, into which are mortised four studs 1 inch by $1\frac{1}{4}$ inches. The lower rail to rest on the top of the back bar, upper rail to be level with top of main sill. Panel $\frac{1}{2}$ inch thick, screwed on inside of studs.

Floor.

Bottom of body to be of best white pine $\frac{3}{4}$ inch thick.

Upper sides.

Upper sides of body to have top rail 10 feet 2 inches long (including 1 inch projection for finish of front end), and bottom rail 10 feet 1 inch long. Both rails $1\frac{1}{4}$ inches wide and 1 inch deep, and mortised for 9 studs. The center of 1st stud to be $5\frac{1}{4}$

inches from front end of body, and the spaces between the studs to be as follows, measuring from center to center: from 1st to 2nd stud, $13\frac{1}{2}$ inches; 2nd to 3rd stud, $13\frac{1}{2}$ inches; 3rd to 4th stud, $13\frac{1}{2}$ inches; 4th to 5th stud, $14\frac{1}{2}$ inches; 5th to 6th stud, $14\frac{1}{2}$ inches; 6th to 7th stud, $10\frac{1}{2}$ inches; 7th to 8th stud, $14\frac{1}{2}$ inches; and 8th to 9th, $14\frac{1}{2}$ inches; and the center of 9th stud to be $7\frac{1}{2}$ inches from back end of body. The studs to be 1 inch by $1\frac{1}{2}$ inches, 12 inches high between shoulders, and framed $\frac{1}{2}$ inch from inside of rails. The panels to be of best yellow poplar, $\frac{1}{2}$ inch thick, and screwed to outside of studs. These sides to be fastened to top of main sills by six hinges each, which are screwed to the inside of the 1st, 3d, 4th, 7th, 8th, and 11th studs, counting from the front of body. Lower part of hinge to be screwed to the main sills. The upper part of these hinges to be 8 inches long, $1\frac{1}{2}$ inches wide, $\frac{1}{2}$ inch thick, and the lower end $2\frac{1}{2}$ inches deep, 3 inches long and $\frac{1}{2}$ inch thick to receive hooks of cross irons on seat bottoms, each part countersunk for five screws. Hinges to be let in flush with inside of the body. Furthermore, each side frame to have on under side of bottom rail two iron stub-pins, $\frac{1}{2}$ inch diameter, and projecting $\frac{1}{2}$ inch, secured so as to enter a hole in a stub-place, which will be let into and secured to the main sill.

Front board.

Front board of same dimensions as tail-gate and of same material, to form front of box under driver's seat. At either end of upper rails of tail-gate and front board to be iron loops, $1\frac{1}{2}$ inches wide, $1\frac{3}{8}$ inch thick, 10 inches long on top and 5 inches long on bottom, which will be riveted to these rails, and be large enough to receive the projecting ends of the main sills at the tail-gate, and the upper rails at the front board.

Front board straps.

The front board will be fastened to the front bar by four iron straps, screwed to the four studs, the lower ends to be curved forward and slide into four staples secured to front bar.

Tail-gate hinges.

The tail-gate is hinged to back bar by four iron straps, one to each of the four studs, to be $9\frac{1}{2}$ inches long, $1\frac{1}{2}$ inches wide, and $\frac{1}{2}$ inch thick, each ending below in an eye to form a half hinge, the other half being adjacent eyes, which will be bolted to the back bar. Through these eight eyes will be passed a continuous $\frac{1}{2}$ -inch iron rod having a bolt-head at one end and a nut at the other end.

Side stays.

The sides of the body will be further held upright by a stay-rod at the rear end on each side. This stay will be of 1 inch round iron at the bottom, tapering to $\frac{1}{2}$ inch at top, there flattened, and terminating in a T, the round continuing to top of T, which will be firmly bolted to the main sill. The lower end to have a shoulder $1\frac{1}{2}$ inches diameter, to rest on back cross-bar, and passing through it is reduced to $\frac{1}{2}$ inch, and secured by washer and nut.

Driver's seat.

The driver's seat and box.—The front is formed by the front board of the body. The top or seat-board is of pine, 1 inch longer than the width of the body, the ends resting on the upper rails, and the front edge resting on the front of the body. This board to be 1 inch thick and 18 inches wide, of pine. This seat-board will be hinged to the back-board, which will be of pine, 14 inches wide, $\frac{3}{4}$ inch thick, and of length same as inside width of body. This board will slip down between two cleats at each end, fastened by screws to upper and lower rail, parallel and 1 inch apart. Lazy-back for driver's seat to be of best ash, 5 inches wide, $\frac{3}{4}$ inch thick, the ends to be fitted with two iron hooks at each end, adjusted to drop into iron sockets fastened to the front bow on each side, top of lazy-back to be 14 inches above seat.

Interior of driver's box.

Interior of driver's box to be divided into two unequal parts by a $\frac{3}{4}$ inch partition of pine, sliding between cleats on front and back of box, 15 inches from left side of body. A keg to be made of oak, 16 inches long, 10 inches in diameter at center, and 9 inches at either end, bound with eight (8) cross hoops $\frac{1}{2}$ inch wide, and supported by neat rests and steadied by cleats screwed on the inside of the top. A circular aperture to

be made in left upper panel near the front, through which the outer end of the keg will project one inch. A substantial nickel-plated screw faucet to be screwed into a $\frac{3}{4}$ inch circular hole in the outer end of keg near the bottom, and to project 4 inches outside of end of keg, and to be protected by an iron curved strap screwed into lower rail, as shown in drawing attached. The rests to be arranged so as to prevent breakage or straining panel.

Toe-board.

Toe-board of best oak, 1 inch thick, $10\frac{1}{2}$ inches wide, 4 feet $2\frac{1}{2}$ inches long, to be let in flush on top of main sills, secured by screws to center cross-bar and to sills by three bolts in each end, the main sills to be slightly beveled at that point where the rear side of the toe-board is let into it, and the toe-board to have a corresponding beveled edge. Toe-board to be set 1 inch from front bar, and to have a toe-rail of $\frac{3}{4}$ inch half round iron projecting 4 inches and raised $3\frac{1}{2}$ inches, having four stay-bars carried across and secured to toe-board by three bolts in each stay. The bolts in the two end stays to be carried through the main sills, and will have a roughened step 4 inches wide by $\frac{3}{8}$ inch thick welded on the stay bar. The roughened step is not to project beyond the sides of main sills, but to be flush with them. The flat side of the toe-rail also will be roughened.

Partition.

A partition to be made in the body, forming an extension of and above the lower front panel, by a pine board 14 inches wide and $\frac{3}{4}$ inch thick, held in place by two parallel cleats on each side of each end, to be 1 inch apart and screwed to top and bottom rail.

Inside seats.

Inside seats to be of white pine, $\frac{3}{4}$ inch thick, two on each side, 3 feet two inches long, 14 inches wide; to be held in position by two leg-irons on front of each seat, which are reveted to a projection of strap-iron, which is fastened across the width of the seats 6 inches from either end to center; bottom of leg-iron to enter hole in plate screwed to bottom of body. Leg-irons $\frac{1}{2}$ inch diameter. Bottom part of seat to be screwed to main sills by two dovetail hooks on each seat at ends of the cross-irons; these hooks to enter angle-plates, which last to be let into and screwed to main sills, as shown by drawings. Cross-irons to have an additional dovetail hook in the middle of the seat, which, when hung into angle-plates on main sills, will cause the seats to form cushions against sides of body.

Lazy-backs.

Inside rests, or lazy-backs, 6 feet 6 inches long, $3\frac{1}{2}$ inches wide, and $\frac{1}{2}$ inch thick, of best poplar, shall be secured along top edge of upper panel, commencing from back end of body.

Step.

Step in rear, of oak, 3 feet long, 8 inches wide, 1 inch thick, set as shown in drawing, $11\frac{1}{2}$ inches below bottom of back bar, and secured to it by two 1-inch oval iron stays, flattened and carried under full width of step $2\frac{1}{2}$ inches from ends. To have 1-inch oval iron braces full width of step, and extending to bottom sills, secured to them in rear of spring-bar with one bolt each. To have a center brace of 1-inch oval iron, full width of step, extending to hind cross-spring, with bolt through spring and spring-bar.

Bows.

Bows.—Five bows of best ash, $1\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, passing through iron staples on upper rails, with tenons at either end to fit into staples on lower rails. Top flat, with rounded corners. Height from upper surface of floor to ridge-pole 4 feet 6 inches. Front bow immediately back of driver's seat; back bow set $2\frac{1}{2}$ inches forward of the inside of the tail-gate, and the top inclined back so as to hang exactly plumb with back of tail-gate. The intermediate bows are to be set equally distant apart in the space between the front and back bows.

Ribs.

Four half bows or ribs, to be equidistant between full bows, and attached to ridge pole and curtain rails by brass loops, one loop secured to either side of each bow and rib 7 inches from top of bows, and fastened by two screws to inside of bows. Brass loops on the front bow to be made tapering, smaller at front, to prevent curtain rail from passing beyond front bow.

Curtain rails.

Curtain rails, 1 inch diameter, of best ash, to pass through loops on bows and extend from front to back bows, to be held in position by thumb-screws through loops on back bows.

Ridge pole.

Ridge pole of ash, 1 inch wide, $\frac{1}{4}$ inch thick, to extend from front to back bow, and passing through brass loops, to be screwed to center of each bow and rib on the inside, and fastened at back end with thumb-screw, the same as the curtain rails. The upper staples shall have openings a trifle over $1\frac{1}{4}$ inches for bows to pass through into lower staples, with openings 1 inch by $\frac{1}{4}$ inch.

Whip socket.

A whip socket to be provided, and secured on right upper panel near driver's seat

TRIMMINGS AND UPHOLSTERY.

Seat trimmings.

Inside seats to be upholstered with best curled hair and russet leather of good quality, $1\frac{1}{2}$ inches high.

Lazy-back trimmings.

Lazy-backs are upholstered same as seats. A cushion to fit driver's seat of same material and upholstered 3 inches high.

Top and curtains.

Top and curtains to be of No. 6 cotton duck. The top to be fastened to the bows just above the curtain rails on either side by nine brass staples with straps, one to each bow and rib, overlapping curtains two inches. Four curtains on each side, to lap over upper panel three inches, and secured by nine wire staples and straps to upper rail, also by staples and straps in each bow in center of each curtain edge. Front and back curtains to be securely stitched to front and back edge of top, and wide enough to lap around corners of front and back bows and fasten to staples which secure first and fourth curtains, also fastened to driver's seat and tail-gate by four staples and straps, all curtains to have circular stay pieces of good leather, well stitched to the canvas opposite each staple, and roll-up straps with hole in end to take staple on each rib.

RUNNING GEAR.

Wheels.

Wheels.—Back 4 feet 2 inches, front 3 feet 6 inches high, without tire. Hub of best elm, rounded back and front, $6\frac{1}{2}$ inches diameter at center, $5\frac{1}{2}$ inches at back, and 5 inches at front, $9\frac{1}{2}$ inches in length, with iron bands at each end of $\frac{3}{8}$ -inch iron $1\frac{1}{2}$ inches wide on front end and $1\frac{1}{2}$ inches wide on back end, mortised for twelve spokes front and fourteen spokes back, and to have a spoke band of $\frac{1}{2}$ -inch oval iron on each side of spokes, mortised $1\frac{1}{2}$ inches by $\frac{1}{8}$ inch, with $\frac{1}{2}$ -inch stagger. Spokes $1\frac{1}{2}$ inches, of best seasoned white oak. Felloe-tenons $\frac{7}{8}$ inch diameter. Rims $2\frac{1}{2}$ inches deep, $1\frac{1}{2}$ inches on tread, two pieces for each wheel, best seasoned white oak. Tire of steel, $1\frac{1}{2}$ inches wide, $\frac{1}{8}$ inch thick, fastened on with tire-bolts between each spoke, two felloe-plates in each wheel over joints of rim.

Axles.

Axles of best quality of refined iron $1\frac{1}{2}$ inches, left square 7 inches from each collar-washer, then $5\frac{1}{2}$ inches octagon, balance round; the spindles to be of a thickness as will admit of their proper play in the boxes.

Collar-washer.—Axle-boxes.

Solid collar-washer, $2\frac{3}{4}$ inches diameter, $\frac{3}{8}$ inch thick, the face of collar-washer and back end of axle arm to form a concave and the inside of back end of axle-box to be

made to fit thereon. Axle-boxes of best foundry iron, $7\frac{1}{2}$ inches long, $1\frac{1}{2}$ inches butt, $1\frac{1}{2}$ inches point, with two lugs 2 inches long, $\frac{1}{2}$ inch high. Oil-chamber 2 inches long, $\frac{1}{8}$ inch deep. Weight of box to be not less than $4\frac{1}{2}$ pounds. Axles to be so arranged as to track five feet from center to center of wheels. Both axles to be straight between the shoulders.

Springs.

Springs.—Platform of No. 3 steel, oil tempered. Two front side springs each 44 inches long, from center of eye to center of coupling, $1\frac{1}{2}$ inches wide, 7 plates. One front cross spring 46 inches long, $1\frac{1}{2}$ inches wide, 7 plates, connected to back ends of side springs with rubber hanger; also gum tubing for ends of the springs, outside diameter of which must be 1 inch. Two hind side springs, 50 inches long, $1\frac{1}{2}$ inches wide, 8 plates, the front end resting between two iron lugs on plate securely bolted to bottom sill. The main plate to be coiled at front end to admit gum tubing of 1 inch outside diameter, with $\frac{3}{8}$ -inch hole through center, the back end to be convex $3\frac{1}{2}$ inches long so that top side of main plate will fit into a gum ring—the second plate to be thinned down at each end and to extend within $1\frac{1}{2}$ inches of end of convex, and to wrap two-thirds around the eye of front end of main plate; the hind side springs must be bent as shown in detailed drawings attached hereto, so that figures Nos. 1 & 2 take a bearing against the under side of sill, on which is placed a piece of rubber $\frac{1}{2}$ inch thick, $1\frac{1}{2}$ inches wide, and 6 inches long, when carrying extra heavy weight. Hind cross springs 46 inches long, $1\frac{1}{2}$ inches wide, 8 plates, attached to side springs with rubber hangers, and fastened to body with oak blocks 12 inches long on top, $7\frac{1}{2}$ inches high, bearing on spring, $4\frac{1}{2}$ inches deep, and 4 inches wide, bolted between two bars by three (3) $\frac{3}{8}$ -inch bolts, these two bars to be each 4 feet 5 inches long [including $1\frac{1}{2}$ inches finish on each end], $1\frac{1}{2}$ inches wide, 3 inches deep in center, and $1\frac{1}{2}$ inches at either end; one $\frac{3}{8}$ -inch bolt passing through ends of each bar and through lower sills, one bolt to be seven inches and the other $12\frac{1}{2}$ inches from back end of body. The hind cross spring to be bent in regular platform shape, with exception of coil or eye, which must be 1 inch inside diameter to receive a gum tubing of same diameter with a $\frac{3}{8}$ -inch hole through which a $\frac{3}{8}$ -inch bolt passes, the second plate to be thinned at ends and to wrap half way around the coil of main plate. The spring is secured to the bar by two 1-inch half oval wrought-iron clips.

Rubber hangers.

The rubber couplings or hangers to consist of an oval iron ring $2\frac{1}{2}$ inches diameter inside, $1\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, into which is forced a rubber ring $2\frac{1}{2}$ inches diameter, 2 inches wide, $\frac{1}{2}$ inch thick. The hind ends of side springs are made half round, with $\frac{5}{8}$ -inch iron staple on top to keep the hanger in position.

The hind side springs are set on iron blocks 6 inches long, $\frac{1}{2}$ inch deep in center, secured by two clips, each of $\frac{1}{2}$ -inch square iron. The front cross spring is clipped to a wood block 18 inches long, $3\frac{1}{2}$ inches deep, $1\frac{1}{2}$ inches wide. The block is clipped to futchells at either end, with $\frac{1}{2}$ -inch half oval iron clips, flattened on top. The foot springs are clipped to front axle in the same manner over blocks $2\frac{1}{2}$ inches deep. All clips of best iron; those of the hind and front cross springs are to pass through iron coupling plates $\frac{7}{8}$ inch thick and 1 inch wide, and those connecting the side springs with the axles are to pass through coach slips placed on under side of axles. All springs to have 5 inches sweep, except hind side springs, which should have 6 inches sweep. The iron hanger couplings which pass through the rubber hangers connecting the front cross spring to back ends of front side springs, and the hind cross spring with back ends of hind side springs, are to be made half round to suit the inside circle of rubber hanger, the upper surface of the portion passing through the rubber hanger to be concave to face the convex surface of end of spring in same hanger, the width of concave to be $1\frac{1}{2}$ inches across to give good bearing on inside of rubber hanger, the length of the coupling to be $1\frac{1}{2}$ inches from under side of part which passes through rubber hanger to center of eye where $\frac{3}{8}$ -inch bolt passes through and connects with side springs, the eye to be $1\frac{1}{2}$ inches diameter by $\frac{5}{8}$ -inch thick.

Futchells.

Futchells to be $49\frac{1}{2}$ inches extreme length, $21\frac{1}{2}$ inches long, $2\frac{1}{2}$ inches wide, and $1\frac{1}{2}$ inches thick, in front of futchell bed (including 18 inches for jams), and 28 inches long, $2\frac{1}{2}$ inches wide, tapering to $1\frac{1}{2}$ inches at end, and $1\frac{1}{2}$ inches deep, from front of futchell bed. Jaws of futchells to have an iron plate on bottom, full width of jaws and $1\frac{1}{2}$ inch thick, running full length of jaws, then to be oval $5\frac{1}{2}$ inches in length, 1 inch wide and $\frac{3}{8}$ inch thick, and forming a boss where it is bolted to futchell bed, then running oval 11 inches where it forms flat $1\frac{1}{2}$ inches wide and $\frac{7}{8}$ inch thick, and receives bolt coming through fifth wheel, and continues $13\frac{1}{2}$ inches, and then it is

tapered off to end of futchells. Futchells to have iron plates on inside of jaws $\frac{1}{2}$ inch thick, 2 inches wide, 18 inches long, and secured to jaw with screws, and to have a plate of iron $3\frac{1}{2}$ inches long, $\frac{1}{8}$ inch thick, and $1\frac{1}{2}$ inches wide on the outside of each jaw, secured by a screw in each and through which the pole-pin is to pass.

Futchell bed.

Futchell bed, $3\frac{1}{2}$ inches deep, $2\frac{1}{2}$ inches wide, 35 inches long, including $2\frac{1}{2}$ inches finish on either end; iron plate $\frac{5}{16}$ inch thick, bolted on under side full length and width of bed, extending along side bars to within $1\frac{1}{2}$ inches of splinter bar, where it is spliced to splinter bar plate by 2 bolts passing through each transom plate, male and female, $26\frac{1}{2}$ inches long, or of a sufficient length to suit futchell bed and fifth wheel, $2\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, secured by four $\frac{3}{8}$ -inch bolts with countersunk heads passing through bed and plate, with hole to receive a $\frac{3}{4}$ -inch king-bolt which is nutted and threaded on top with spring key above nut.

Chairs.

Chairs, or upper platform bars, consist of three bars 4 feet 5 inches long, center bar (which must have king-bolt plate on top 10 inches long) $2\frac{1}{2}$ inches at center and tapering to 2 inches at ends. Front and rear bars $1\frac{1}{2}$ inches thick. All three bars to be 6 inches deep, and cut away by degrees to reach the depth of $1\frac{1}{2}$ inches at the ends. Three bars framed across upper platform bars, running from front to back bar, one bar to rest opposite center of body and one to rest opposite each sill. These bars are fastened to body by $\frac{1}{2}$ -inch bolts passing through sills and bars at either end; center bar is bolted at back end to body with $\frac{5}{16}$ -inch bolts, also bolted to back and front upper platform bars with $\frac{1}{2}$ -inch bolts. Bars to be cut out between the bearings, as per drawing. The upper transom plate is to be secured by four bolts with countersunk heads passing through center bar of upper platform.

Fifth wheel.

Fifth wheel.—Two circles of iron 30 inches diameter, $1\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, with iron hoops $\frac{3}{4}$ inch wide, $\frac{3}{16}$ inch thick, shrunk on outer edge of upper half to receive lower half. The lower half is secured to futchells and futchell bed, with intervening wood blocks, by six bolts with countersunk heads. The upper half is secured to chairs by six bolts with countersunk heads.

Side bars.

Side bars, $1\frac{1}{2}$ inches wide and $1\frac{1}{2}$ inches deep, mortised into futchell bed and splinter bar, to have iron plates $\frac{1}{2}$ inch thick, full length and width of bars, securely bolted to them and welded plates under futchell bed.

Splinter bar.

Splinter bar, 4 feet 6 inches long, $1\frac{1}{2}$ inches deep in center, and $1\frac{1}{2}$ inches deep at ends, $1\frac{1}{2}$ inches wide, to rest on two (2) iron ferrules each 2 inches diameter and $1\frac{1}{2}$ inches deep and made of $\frac{1}{2}$ -inch iron, filled with wood on top of futchells, 2 inches from front end. The splinter bar to have a stay iron $1\frac{1}{2}$ inches below futchells (to receive block for draught spring) $1\frac{3}{8}$ inches wide and $\frac{3}{8}$ inch thick, extending 7 inches in length, with lugs extending upwards on outside of futchells to within $\frac{1}{4}$ inch of splinter bar, where they form $\frac{7}{16}$ inch round bolts and pass through splinter bar and are nutted on top; from the lugs on each side of futchells the stay iron is to be oval, $9\frac{1}{2}$ inches in length, 1 inch wide and $\frac{3}{16}$ inch thick, then forming flat and extending 2 inches, where it branches on to side bars and is spliced with plate of futchell bed as hereinbefore specified; then extending along splinter bar $2\frac{1}{2}$ inches, where eye passes through for swingle-tree attachment, then extending $1\frac{1}{2}$ inches, where lugs are formed to receive front side springs, then tapered off to ends of splinter bar. The splinter bar to have on top an iron plate $1\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, extending 15 inches from ends and 8 inches on side bars, securely bolted to each, and to form a roughened step 3 inches diameter on either end, also to have on top at center an iron plate 10 inches long, $1\frac{1}{2}$ inches wide, and $\frac{1}{2}$ inch thick.

Pole.

Tongue or pole to be $3\frac{1}{2}$ inches wide at front of jaws, and $2\frac{3}{4}$ inches at back end, 2 inches thick, 9 feet 6 inches long from futchell to extreme front end, $1\frac{1}{2}$ inches square at front end, with pole-hook and strap-loops of $\frac{1}{2}$ -inch round iron, flattened at ends to

1 inch by $\frac{1}{4}$ inch, and not less than 7 inches long, bolted to front end of pole by two $\frac{1}{8}$ -inch bolts. A pole-stop of iron $1\frac{1}{2}$ inches wide, $\frac{1}{4}$ inch thick, to be placed on under side of futchells at their back ends to allow the pole to drop $1\frac{1}{2}$ inches below futchells at that point. The pole is connected with the wagon by a pin of $\frac{1}{4}$ -inch round iron passing through futchells and pole 7 inches from front end of futchells, and secured by a spring key.

Swingle-trees.

Swingle-trees 34 inches long, $2\frac{1}{4}$ inches wide, and $1\frac{1}{4}$ inches thick in center, $1\frac{1}{4}$ inches at ends, with $\frac{1}{2}$ -inch iron staple at center, passing through and fastened with screw and nut. Swingle-trees to be made of best hickory, and have a ferrule fastened on each end, and a cock-eye with ring $1\frac{1}{2}$ inches diameter inside, of $\frac{3}{8}$ -inch iron, screwed into each end three (3) inches, the screw of cock-eye to be $\frac{1}{2}$ -inch thick; the swingle-trees to be hung to an iron rod from the half elliptic spring back of splinter bar by a swivel attachment of iron, from the ends of spring to center of swingle-trees, the swingle-trees also to have iron plates where they strike the wheels to prevent wearing. The iron rod connecting swingle-tree with spring back of splinter bar is to pass through an oval shaped iron loop of $\frac{1}{2}$ -inch iron bolted to splinter bar opposite ends of half elliptic spring. The half elliptic spring above referred to is to be $1\frac{1}{2}$ inches wide, $39\frac{1}{2}$ inches extreme length, having five plates No. 3 oil-tempered steel.

Brake.

Brake (see drawing attached). The brake-arms "A" are clevised on the hangers into which front ends of hind side springs are fastened, the same $\frac{7}{16}$ -inch bolt passing through both and nutted on the inside; length of each arm 11 inches from center of outside eye to brake block. Diameter of iron $\frac{7}{8}$ inch at upper end and extending down to within $1\frac{1}{2}$ inches of brake-block where it must be $1\frac{1}{2}$ inches diameter extending only $\frac{1}{2}$ inch to keep connecting rods "D" in place; the brake-blocks to be made of hickory $1\frac{1}{2}$ inches thick and 2 inches wide and fastened on wrought-iron shoes with six (6) wood screws No. 16— $1\frac{1}{2}$ inches long; the fulcrum slips "L" are each made with an arm or journal for levers "C" to work on and fastened on the hind side spring 2 inches in front of axle, by two ends $\frac{1}{2}$ inch diameter passing through a coupling plate underneath spring block threaded and nutted, the spring-block to turn down $\frac{3}{8}$ inch to keep coupling in its place; also a keeper plate $1\frac{1}{2}$ inches wide by $\frac{3}{16}$ inch thick to be bolted on top of springs and pass under clips and bent up behind the back slips, and also in front of front slips, and of fulcrum slips to keep them from pulling forward; the fulcrum slips should not be less than $1\frac{1}{2}$ inches wide by $\frac{1}{2}$ inch thick, the arms to be $1\frac{1}{2}$ inches diameter extending out from springs $\frac{3}{4}$ inch, then to extend out $1\frac{1}{2}$ inches by full $\frac{3}{4}$ inch diameter, then to extend $\frac{3}{4}$ inch by $\frac{3}{8}$ inch for thread and have a $\frac{1}{2}$ -inch nut fitted on; these journals must be turned up in a lathe and be well fitted; the back levers "C" work on these journals, the lower ends being at journals $1\frac{1}{2}$ inches wide by $\frac{3}{16}$ inch thick, bent forward so that they will not strike the hubs of the hind wheels when in use; they are also close up to the shoulders of journals, while the longer ends are $1\frac{1}{2}$ inches wide by $\frac{3}{16}$ inch thick at journals at the outer side so that they will not strike the body where it connects with longitudinal rod "F" by $\frac{3}{8}$ -inch bolt; length of upper ends from center of journals to center of bolt 21 inches; length of lower ends from center of journals to center of bolt 6 inches where they connect with rods "D" by $\frac{7}{16}$ -inch bolt; length of rods "D" from center to center 25 inches and their diameter $\frac{1}{2}$ inch; length of rods "F" 7 feet, $\frac{3}{4}$ inch from center to center; the foot lever "G" is $1\frac{1}{2}$ inches wide by $\frac{1}{2}$ inch thick, $5\frac{1}{2}$ inches from center of hole tapered in width down to the circle of square hole where it connects with transverse bar and is fastened with $\frac{3}{4}$ -inch nut; the upper end is tapered in width to $1\frac{1}{2}$ inches from center of $\frac{7}{16}$ -inch hole where it turns inward $4\frac{1}{2}$ inches, then turns back 1 inch to keep driver's foot from slipping off; the transverse bar "K" is 5 feet 6 inches long between the inside of foot-lever and arm that connects with longitudinal rods, the arm to be turned up $4\frac{1}{2}$ inches in length from center of rod to center of holes, and to be $1\frac{1}{2}$ inches wide by $\frac{1}{2}$ inch thick; this bar must be $1\frac{1}{8}$ inches diameter, extending inward from the ends 3 inches to admit of grooves being cut $\frac{1}{4}$ inch deep by $\frac{1}{4}$ -inch wide to admit of wearing plates "H" which are let into the blocks under main sills flush with the wood and fastened with four (4) wood screws No. 14, 1 inch long; spring "Q" to be fastened on top rail at front to keep foot lever in position when not in use.

Stretcher rest.

A stretcher rest to be provided on the floor of the wagon constructed in the following manner: Two light half elliptic springs of two plates each $1\frac{1}{2}$ inches wide, by $\frac{3}{16}$ inch thick set 2 feet 7 inches center to center, on each side of wagon, each spring hinged at one end to a shoe which is secured to the floor by two $\frac{1}{4}$ -inch bolts; the

bolts by which the springs are hinged to the shoes are to pass through gum tubing in eyes of springs; outside diameter of tubing is to be 1 inch and inside diameter $\frac{3}{4}$ inch to correspond with diameter of bolts; the heads of these bolts on sides of shoes next to panels are to be let in flush with shoes. The other end of each spring will have a brass roller $2\frac{1}{2}$ inches in diameter by $1\frac{1}{2}$ inches wide, to run on iron plate let into floor and secured to it by screws. The springs to sustain a roller bar of steel $\frac{3}{4}$ inch thick by $1\frac{1}{2}$ inches wide and 6 feet $\frac{1}{2}$ inch long, having four double tapered ash rollers, each 2 inches diameter, except the one hereinafter specified, placed as hereinafter directed and as shown in drawings, having iron wings or ferrules on ends $\frac{3}{4}$ inch wide by $\frac{1}{2}$ inch thick. The 1st and 2nd rollers from rear to be made each in two (2) equal sections and revolve on $\frac{1}{2}$ -inch gas pipe passing through their centers lengthwise; an iron washer 2 inches diameter by $\frac{1}{2}$ inch thick to be shrunk on the middle of this pipe between the sections, each section to have iron ferrules on ends $\frac{3}{4}$ inch wide by $\frac{1}{2}$ inch thick. Iron pins $\frac{1}{2}$ inch diameter to be welded in each end of pipe to project $\frac{3}{4}$ inch to set into roller-bar, the rollers to be kept permanently on the pipe by iron washers $1\frac{1}{2}$ inches diameter by $\frac{1}{16}$ inch thick properly riveted on to these iron pins. The 3rd & 4th rollers from the rear to be provided with iron pivots set firmly in their ends to revolve in roller bars. The 4th roller from rear to have a rubber washer $3\frac{1}{2}$ inches diameter outside and $\frac{3}{8}$ inch thick, to be set firmly on the center. The roller bar on the right side of ambulance wagon to be provided with three (3) U-shaped slots $\frac{3}{4}$ inch deep and $\frac{1}{2}$ inch wide; the roller bar on the left side of ambulance wagon to be provided with (3) $\frac{1}{2}$ -inch holes set $\frac{1}{2}$ inch from top edge of roller bar to receive pivots of 1st, 2nd & 4th rollers.

Height from bottom of floor to top of roller-bar to be 4 inches. The center of plate receiving the 3rd roller from rear end to be $\frac{1}{2}$ inch above top of roller bar and the slot of this plate to be deep enough to bring the 3rd roller in a line with the top of the other three rollers. The 3rd roller to be $\frac{1}{2}$ inch less in diameter than the other three. (See drawing attached, showing position of rollers and method of attaching the third roller from rear end of wagon to spring.)

Painting.

All parts of the wood work of the body, with the exception of the bows, ribs, ridge-poles, and curtain rails, will be painted dark olive-green. A first coat of heavy boiled linseed oil will be laid on hot. When this priming is thoroughly dry three successive coats of the olive-green paint will be laid on, mixed with boiled linseed oil, without admixture of turpentine or varnish. Sufficient time for drying of each coat will be allowed. All iron work will be painted black, with three (3) coats of lead paint mixed with boiled linseed oil. On the panels of the upper sections, midway between the second and third bows from the front, the letters U. S., six inches in height, will be conspicuously painted in bright yellow, of the tint of the hospital flag. On the panels, between the first and second bows, the red Geneva or Greek cross will be painted on a white ground. All the wood work of the running gear will be painted in the same manner as that of the body of the wagon.

General provisions.

Spokes and wheel boxes to be well wedged; all tenons to be secured with wooden pins except those of bows; all welds to be made smooth and strong; corners of felloes to be rounded between spokes; lower studs and sills to be chamfered and neatly finished; all clips to be neatly finished with cross-tie washers 1 inch by $1\frac{1}{2}$ inches; sharp corners of bows to be removed; covering of seats and lazy-backs to be well fastened.

All wood and iron work to be of best material; sills, cross-bars, studs, rails, foot-boards of body to be of best seasoned white oak; frame work of upper section of body, bows, lazy-back, curtain rails, and cleats to be of best seasoned ash; all panels to be of best seasoned yellow poplar; wood work of running-gear to be of best hickory.

Parts to be interchangeable.

The ambulance wagon is to be so constructed that the several parts of one wagon will be interchangeable with any other wagon, so as to require no numbering or arranging for putting together; and the work, in all its parts, executed in the best workmanlike manner.

The wagon may be prepared for packing by removing the front load, the top and back of driver's seat, front lazy-back, curtain rails, ridge pole, and bows, which will allow the upper panels to lay on the tail-gate and front bar, and all can be packed inside of lower part of body.

Slide 1

Plate 2.

Chap 3.



Chap 4.

Chap 5.

Shale G.

[General Orders, No. 67.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
Washington, September 21, 1880.

By direction of the Secretary of War, section IV (page 20) of General Orders No. 40, May 22, 1880, from this office, is amended so as to provide that the execution of bonds may be waived where the contract involves no greater sum than five hundred dollars in value.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

[General Orders, No. 33.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
Washington, March 25, 1881.

By direction of the Secretary of War Article VIII of form for wagon transportation contract prescribed in General Orders, No. 40, of 1880, from this office, is amended to read as follows:

VIII. Upon the completion of the loading of the train, bills of lading of that date shall be signed by the said ———, or ——— authorized agent, and the stores so receipted for shall be transported without delay, by the most direct route, to their destination, and there delivered, in good order and condition, to the officer or agent of the quartermaster's department authorized to receive them. Such transportation shall be effected within a reasonable time after the completion of the loading of the train, as fixed by the date of the bill of lading, not exceeding ——— days per one hundred miles for horse and mule trains required under the provisions of Article III of this agreement, nor ——— days per one hundred miles for all other trains, unless a longer time be authorized in writing by the forwarding officer prior to the commencement of or during the journey (but not after its completion), or unless detained by orders *en route*, which must be produced, and the said party of the second part shall be charged, for any delay beyond the time specified, at the rate of ten (10) cents *per diem* for each and every one hundred (100) pounds of freight in the train for each and every day of delay, unless, in the judgment of a board of survey whose proceedings and findings are duly approved and confirmed by the proper authority, such delay arises from causes beyond the control of the contractor.

The proceedings and findings of the board of survey will be subject to the approval and confirmation of the commanding officer under whose direction the contracting officer may be serving.

In cases where the contracts are for transportation at general depots of the quartermaster's department, independent posts and arsenals, not under the orders of a department commander, the proceedings and findings of the board of survey will be subject to the approval and confirmation of the Quartermaster-General.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

[General Orders, No. 63.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
Washington, July 14, 1881.

The following order from the War Department is published for the information and guidance of all concerned:

As in determining questions of good faith and validity of proposals for contracts for supplies or services much sometimes depends upon a postmark or other data, the envelopes in which such papers are received should—under the last clause of paragraph 5, General Orders, No. 40, of 1880, from this office (paragraph 1481, *Codified Regulations*)—be carefully preserved and filed with the proposals or other papers they contained.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

L.

SPECIFICATIONS FOR AMBULANCE WAGON FOR U. S. ARMY USE, COMPLETE, (INCLUDING TWO (2) HAND STRETCHERS.)

[Prepared by Board of Officers convened in Washington, D. C., by par. 4, S. O., No. 44, War Department, A. G. O., dated March 16, 1875 (organization modified by subsequent orders), and approved by the Secretary of War, October 31, 1877, as subsequently modified and altered after trial in actual use, and approved and adopted by the Secretary of War, May 25, 1881.]

BODY.*Main sills.*

Main sills, two, 11 feet $1\frac{1}{2}$ inches extreme length, (including $11\frac{1}{2}$ inches projection for toe-board, and 1 inch finish outside of tail-gate), $1\frac{1}{8}$ inches wide, $2\frac{1}{2}$ inches deep, each sill to have on inside 4 inches from back end, an iron strap loop into which is fastened a leather loop $6\frac{1}{2}$ inches long, $\frac{7}{8}$ inch wide, and rounded to pass under handle of stretcher.

Cross bars.

Cross bars, three, mortised $1\frac{1}{2}$ inches into main sill. The front bar to be $2\frac{1}{2}$ inches wide, $2\frac{1}{2}$ inches deep, and framed into main sill $11\frac{1}{2}$ inches from the front end. The back bar, 3 inches wide, $1\frac{1}{8}$ inches deep, to be framed into main sill 3 feet $4\frac{1}{2}$ inches from the front bar, out to out. The center bar 3 inches by $1\frac{1}{2}$ inches, framed into main sill equally distant between front and back bars, and flush on bottom.

Bottom sills.

Bottom sills, two, 6 feet $11\frac{1}{2}$ inches long, 3 inches wide, $1\frac{1}{8}$ inches deep, mortised to receive seven studs each; the studs 1 inch by $1\frac{1}{2}$ inches, and $9\frac{7}{8}$ inches long between the shoulders, with $\frac{7}{16}$ inch by width of stud tenons on upper end, and $\frac{7}{16}$ inch by width of stud tenons on lower end, so as to give a drop of 11 inches below bottom of main sill.

Cross bars.

Cross bars framed into lower sill, five. The front bar to have a $\frac{1}{2}$ inch curve toward the back, and an iron plate $\frac{3}{4}$ inch wide and $\frac{1}{2}$ inch thick screwed on front for its full length, the screws to be $\frac{3}{4}$ inch No. 10, and to be set 4 inches apart. The front bar mortised to receive four studs of same dimensions as those described for upper sills, passing through upper back bar forming front of drop or lower part of body; to be 3 inches wide, $1\frac{1}{8}$ inches deep. The back bar of lower sill, $2\frac{1}{2}$ inches deep, $1\frac{1}{8}$ inches wide, to project $4\frac{1}{2}$ inches on either side of the body and be mortised to receive studs of lower sills. The three other bars to be framed into lower sill equal distance apart as in drawings. Width of body, 4 feet $2\frac{1}{2}$ inches out to out, and 3 feet 11 inches the clear, inside.

Panels.

Side panels of lower part of body to be of best yellow poplar, $9\frac{7}{8}$ inches deep, 6 feet $10\frac{3}{4}$ inches long, $\frac{1}{2}$ inch thick, screwed to inside of studs.

Tail-gate.

Tail-gate.—The length to be same as the inside width of the body, and to comprise a oak frame with upper and lower rails 1 inch deep and $1\frac{1}{8}$ inches wide, into which are mortised four studs 1 inch by $1\frac{1}{2}$ inches. The lower rail to rest on the top of the back bar, upper rail to be level with top of main sill. Panel $\frac{1}{2}$ inch thick, screwed on inside of studs.

Floor.

Bottom of body to be of best white pine $\frac{3}{4}$ inch thick.

Upper sides.

Upper sides of body to have top rail 10 feet 2 inches long (including 1 inch projection for finish of front end), and bottom rail 10 feet 1 inch long. Both rails $1\frac{1}{8}$ inches wide and 1 inch deep, and mortised for 9 studs. The center of 1st stud to be $5\frac{1}{2}$

inches from front end of body, and the spaces between the studs to be as follows measuring from center to center: from 1st to 2nd stud, $13\frac{1}{4}$ inches; 2nd to 3rd stud, $13\frac{1}{2}$ inches; 3rd to 4th stud, $13\frac{1}{2}$ inches; 4th to 5th stud, $14\frac{1}{4}$ inches; 5th to 6th stud, $14\frac{1}{2}$ inches; 6th to 7th stud, $10\frac{1}{4}$ inches; 7th to 8th stud, $14\frac{1}{2}$ inches; and 8th to 9th, $14\frac{1}{2}$ inches; and the center of 9th stud to be $7\frac{1}{4}$ inches from back end of body. The studs to be 1 inch by $1\frac{1}{2}$ inches, 12 inches high between shoulders, and framed $\frac{1}{4}$ inch from inside of rails. The panels to be of best yellow poplar, $\frac{1}{2}$ inch thick, and screwed to outside of studs. These sides to be fastened to top of main sills by six hinges each, which are screwed to the inside of the 1st, 3d, 4th, 7th, 8th, and 11th studs, counting from the front of body. Lower part of hinge to be screwed to the main sills. The upper part of these hinges to be 8 inches long, $1\frac{1}{2}$ inches wide, $\frac{1}{4}$ inch thick, and the lower end $2\frac{1}{2}$ inches deep, 3 inches long and $\frac{1}{4}$ inch thick to receive hooks of cross irons on seat bottoms, each part countersunk for five screws. Hinges to be let in flush with inside of the body. Furthermore, each side frame to have on under side of bottom rail two iron stub-pins, $\frac{1}{2}$ inch diameter, and projecting $\frac{1}{4}$ inch, secured so as to enter a hole in a stub-place, which will be let into and secured to the main sill.

Front board.

Front board of same dimensions as tail-gate and of same material, to form front of box under driver's seat. At either end of upper rails of tail-gate and front board to be iron loops, $1\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, 10 inches long on top and 5 inches long on bottom, which will be riveted to these rails, and be large enough to receive the projecting ends of the main sills at the tail-gate, and the upper rails at the front board.

Front board straps.

The front board will be fastened to the front bar by four iron straps, screwed to the four studs, the lower ends to be curved forward and slide into four staples secured to front bar.

Tail-gate hinges.

The tail-gate is hinged to back bar by four iron straps, one to each of the four studs, to be $9\frac{1}{2}$ inches long, $1\frac{1}{2}$ inches wide, and $\frac{1}{4}$ inch thick, each ending below in an eye to form a half hinge, the other half being adjacent eyes, which will be bolted to the back bar. Through these eight eyes will be passed a continuous $\frac{1}{2}$ -inch iron rod having a bolt-head at one end and a nut at the other end.

Side stays.

The sides of the body will be further held upright by a stay-rod at the rear end on each side. This stay will be of 1 inch round iron at the bottom, tapering to $\frac{1}{2}$ inch at top, there flattened, and terminating in a T, the round continuing to top of T, which will be firmly bolted to the main sill. The lower end to have a shoulder $1\frac{1}{2}$ inches diameter, to rest on back cross-bar, and passing through it is reduced to $\frac{1}{2}$ inch, and secured by washer and nut.

Driver's seat.

The driver's seat and box.—The front is formed by the front board of the body. The top or seat-board is of pine, 1 inch longer than the width of the body, the ends resting on the upper rails, and the front edge resting on the front of the body. This board to be 1 inch thick and 18 inches wide, of pine. This seat-board will be hinged to the back-board, which will be of pine, 14 inches wide, $\frac{7}{8}$ inch thick, and of length same as inside width of body. This board will slip down between two cleats at each end, fastened by screws to upper and lower rail, parallel and 1 inch apart. Lazy-back for driver's seat to be of best ash, 5 inches wide, $\frac{3}{4}$ inch thick, the ends to be fitted with two iron hooks at each end, adjusted to drop into iron sockets fastened to the front bow on each side, top of lazy-back to be 14 inches above seat.

Interior of driver's box.

Interior of driver's box to be divided into two unequal parts by a $\frac{3}{4}$ inch partition of pine, sliding between cleats on front and back of box, 15 inches from left side of body. A keg to be made of oak, 16 inches long, 10 inches in diameter at center, and 9 inches at either end, bound with eight (8) cross hoops $\frac{1}{2}$ inch wide, and supported by neat rests and steadied by cleats screwed on the inside of the top. A circular aperture to

made in left upper panel near the front, through which the outer end of the keg project one inch. A substantial nickel-plated screw faucet to be screwed into each circular hole in the outer end of keg near the bottom, and to project 4 inches outside of end of keg, and to be protected by an iron curved strap screwed into lower panel as shown in drawing attached. The rests to be arranged so as to prevent break- or straining panel.

Toe-board.

Toe-board of best oak, 1 inch thick, $10\frac{1}{2}$ inches wide, 4 feet $2\frac{1}{2}$ inches long, to be let in on top of main sills, secured by screws to center cross-bar and to sills by three bolts in each end, the main sills to be slightly beveled at that point where the rear end of the toe-board is let into it, and the toe-board to have a corresponding beveled edge. Toe-board to be set 1 inch from front bar, and to have a toe-rail of $\frac{7}{8}$ inch half round iron projecting 4 inches and raised $3\frac{1}{2}$ inches, having four stay-bars carried across and secured to toe-board by three bolts in each stay. The bolts in the two ends to be carried through the main sills, and will have a roughened step 4 inches wide by $\frac{3}{8}$ inch thick welded on the stay bar. The roughened step is not to project beyond the sides of main sills, but to be flush with them. The flat side of the toe-rail on top will be roughened.

Partition.

A partition to be made in the body, forming an extension of and above the lower front panel, by a pine board 14 inches wide and $\frac{7}{8}$ inch thick, held in place by two parallel cleats on each side of each end, to be 1 inch apart and screwed to top and bottom rail.

Inside seats.

Inside seats to be of white pine, $\frac{3}{4}$ inch thick, two on each side, 3 feet two inches long, 14 inches wide; to be held in position by two leg-irons on front of each seat, which are reveted to a projection of strap-iron, which is fastened across the width of the seats 6 inches from either end to center; bottom of leg-iron to enter hole in plate screwed to bottom of body. Leg-irons $\frac{1}{2}$ inch diameter. Bottom part of seat to be secured to main sills by two dovetail hooks on each seat at ends of the cross-irons; these hooks to enter angle-plates, which last to be let into and screwed to main sills, as shown by drawings. Cross-irons to have an additional dovetail hook in the middle of the seat, which, when hung into angle-plates on main sills, will cause the seats to form cushions against sides of body.

Lazy-backs.

Inside rests, or lazy-backs, 6 feet 6 inches long, $3\frac{1}{2}$ inches wide, and $\frac{1}{2}$ inch thick, of white poplar, shall be secured along top edge of upper panel, commencing from back end of body.

Step.

Step in rear, of oak, 3 feet long, 8 inches wide, 1 inch thick, set as shown in drawing, $11\frac{1}{2}$ inches below bottom of back bar, and secured to it by two 1-inch oval iron bolts, flattened and carried under full width of step $2\frac{1}{2}$ inches from ends. To have two oval iron braces full width of step, and extending to bottom sills, secured to them in rear of spring-bar with one bolt each. To have a center brace of 1-inch oval iron, full width of step, extending to hind cross-spring, with bolt through spring and spring-bar.

Bows.

Bows.—Five bows of best ash, $1\frac{1}{2}$ inches wide, $\frac{3}{4}$ inch thick, passing through iron plates on upper rails, with tenons at either end to fit into staples on lower rails. To be flat, with rounded corners. Height from upper surface of floor to ridge-pole 4 feet 6 inches. Front bow immediately back of driver's seat; back bow set $2\frac{1}{2}$ inches forward of the inside of the tail-gate, and the top inclined back so as to hang exactly in line with back of tail-gate. The intermediate bows are to be set equally distant apart in the space between the front and back bows.

Ribs.

Four half bows or ribs, to be equidistant between full bows, and attached to ridge-pole and curtain rails by brass loops, one loop secured to either side of each bow and $7\frac{1}{2}$ inches from top of bows, and fastened by two screws to inside of bows. Brass loops on the front bow to be made tapering, smaller at front, to prevent curtain rail from passing beyond front bow.

Curtain rails.

Curtain rails, 1 inch diameter, of best ash, to pass through loops on bows and extend from front to back bows, to be held in position by thumb-screws through loops on back bows.

Ridge pole.

Ridge pole of ash, 1 inch wide, $\frac{1}{4}$ inch thick, to extend from front to back bow, and passing through brass loops, to be screwed to center of each bow and rib on the inside, and fastened at back end with thumb-screw, the same as the curtain rails. The upper staples shall have openings a trifle over $1\frac{1}{4}$ inches for bows to pass through into lower staples, with openings 1 inch by $\frac{5}{8}$ inch.

Whip socket.

A whip socket to be provided, and secured on right upper panel near driver's seat

TRIMMINGS AND UPHOLSTERY.

Seat trimmings.

Inside seats to be upholstered with best curled hair and russet leather of good quality, $1\frac{1}{4}$ inches high.

Lazy-back trimmings.

Lazy-backs are upholstered same as seats. A cushion to fit driver's seat of same material and upholstered 3 inches high.

Top and curtains.

Top and curtains to be of No. 6 cotton duck. The top to be fastened to the bows just above the curtain rails on either side by nine brass staples with straps, one to each bow and rib, overlapping curtains two inches. Four curtains on each side, to lap over upper panel three inches, and secured by nine wire staples and straps to upper rail, also by staples and straps in each bow in center of each curtain edge. Front and back curtains to be securely stitched to front and back edge of top, and wide enough to lap around corners of front and back bows and fasten to staples which secure first and fourth curtains, also fastened to driver's seat and tail-gate by four staples and straps, all curtains to have circular stay pieces of good leather, well stitched to the canvas opposite each staple, and roll-up straps with hole in end to take staple on each rib.

RUNNING GEAR.

Wheels.

Wheels.—Back 4 feet 2 inches, front 3 feet 6 inches high, without tire. Hub of best elm, rounded back and front, $6\frac{1}{2}$ inches diameter at center, $5\frac{1}{2}$ inches at back, and 5 inches at front, $9\frac{1}{2}$ inches in length, with iron bands at each end of $\frac{3}{8}$ -inch iron $1\frac{1}{4}$ inches wide on front end and $1\frac{1}{4}$ inches wide on back end, mortised for twelve spokes front and fourteen spokes back, and to have a spoke band of $\frac{3}{8}$ -inch oval iron on each side of spokes, mortised $1\frac{1}{2}$ inches by $\frac{3}{16}$ inch, with $\frac{1}{2}$ -inch stagger. Spokes $1\frac{1}{4}$ inches of best seasoned white oak. Felloe-tenons $\frac{1}{2}$ inch diameter. Rims $2\frac{1}{4}$ inches deep, $1\frac{1}{2}$ inches on tread, two pieces for each wheel, best seasoned white oak. Tire of steel, $1\frac{1}{2}$ inches wide, $\frac{5}{16}$ inch thick, fastened on with tire-bolts between each spoke, two felloe-plates in each wheel over joints of rim.

Axles.

Axles of best quality of refined iron $1\frac{1}{2}$ inches, left square 7 inches from each collar-washer, then $5\frac{1}{4}$ inches octagon, balance round; the spindles to be of a thickness as will admit of their proper play in the boxes.

Collar-washer.—Axle-boxes.

Solid collar-washer, 2 $\frac{1}{2}$ inches diameter, $\frac{3}{8}$ inch thick, the face of collar-washer and back end of axle arm to form a concave and the inside of back end of axle-box to be

ade to fit thereon. Axle-boxes of best foundry iron, $7\frac{1}{2}$ inches long, $1\frac{1}{2}$ inches butt, inches point, with two lugs 2 inches long, $\frac{1}{2}$ inch high. Oil-chamber 2 inches long, inch deep. Weight of box to be not less than $4\frac{1}{2}$ pounds. Axles to be so arranged to track five feet from center to center of wheels. Both axles to be straight between the shoulders.

Springs.

Springs.—Platform of No. 3 steel, oil tempered. Two front side springs each 44 inches long, from center of eye to center of coupling, $1\frac{1}{2}$ inches wide, 7 plates. One front cross spring 46 inches long, $1\frac{1}{2}$ inches wide, 7 plates, connected to back ends of side springs with rubber hanger; also gum tubing for ends of the springs, outside diameter of which must be 1 inch. Two hind side springs, 50 inches long, $1\frac{1}{2}$ inches wide, 8 plates, the front end resting between two iron lugs on plate securely bolted to bottom sill. The main plate to be coiled at front end to admit gum tubing of 1 inch outside diameter, with $\frac{3}{8}$ -inch hole through center, the back end to be convex $3\frac{1}{2}$ inches long so that top edge of main plate will fit into a gum ring—the second plate to be thinned down at each end and to extend within $1\frac{1}{2}$ inches of end of convex, and to wrap two-thirds round the eye of front end of main plate; the hind side springs must be bent as shown in detailed drawings attached hereto, so that figures Nos. 1 & 2 take a bearing against the underside of sill, on which is placed a piece of rubber $\frac{1}{2}$ inch thick, $1\frac{1}{2}$ inches wide, and 6 inches long, when carrying extra heavy weight. Hind cross springs 46 inches long, $1\frac{1}{2}$ inches wide, 8 plates, attached to side springs with rubber hangers, and fastened to body with oak blocks 12 inches long on top, $7\frac{1}{2}$ inches high, bearing on spring, $4\frac{1}{2}$ inches deep, and 4 inches wide, bolted between two bars by three (3) $\frac{3}{8}$ -inch bolts, these two bars to be each 4 feet 5 inches long [including $1\frac{1}{2}$ inches finish on each end], $1\frac{1}{2}$ inches wide, 3 inches deep in center, and $1\frac{1}{2}$ inches at either end; one $\frac{3}{8}$ -inch bolt passing through ends of each bar and through lower sills, one bolt to be seven inches and the other $12\frac{1}{2}$ inches from back end of body. The hind cross spring to be bent in regular platform shape, with exception of coil or eye, which must be 1 inch inside diameter to receive a gum tubing of same diameter with a $\frac{3}{8}$ -inch hole through which a $\frac{3}{8}$ -inch bolt passes, the second plate to be thinned at ends and to wrap half way around the coil of main plate. The spring is secured to the bar by two 1-inch half oval wrought-iron clips.

Rubber hangers.

The rubber couplings or hangers to consist of an oval iron ring $2\frac{1}{2}$ inches diameter inside, $1\frac{1}{2}$ inches wide, $\frac{3}{16}$ inch thick, into which is forced a rubber ring $2\frac{1}{2}$ inches diameter, 2 inches wide, $\frac{1}{2}$ inch thick. The hind ends of side springs are made half round, with $\frac{5}{16}$ -inch iron staple on top to keep the hanger in position.

The hind side springs are set on iron blocks 6 inches long, $\frac{1}{2}$ inch deep in center, secured by two clips, each of $\frac{1}{2}$ -inch square iron. The front cross spring is clipped to wood block 18 inches long, $3\frac{1}{2}$ inches deep, $1\frac{1}{2}$ inches wide. The block is clipped toutchells at either end, with $\frac{1}{2}$ -inch half oval iron clips, flattened on top. The foot springs are clipped to front axle in the same manner over blocks $2\frac{1}{2}$ inches deep. All clips of best iron; those of the hind and front cross springs are to pass through iron coupling plates $\frac{1}{16}$ inch thick and 1 inch wide, and those connecting the side springs with the axles are to pass through coach slips placed on under side of axles. All springs to have 5 inches sweep, except hind side springs, which should have 6 inches sweep. The iron hanger couplings which pass through the rubber hangers connecting the front cross spring to back ends of front side springs, and the hind cross spring with back ends of hind side springs, are to be made half round to suit the inside circle of rubber hanger, the upper surface of the portion passing through the rubber hanger to be concave to face the convex surface of end of spring in same hanger, the width of concave to be $1\frac{1}{2}$ inches across to give good bearing on inside of rubber hanger, the length of the coupling to be $1\frac{1}{2}$ inches from under side of part which passes through rubber hanger to center of eye where $\frac{3}{8}$ -inch bolt passes through and connects with side springs, the eye to be $1\frac{1}{2}$ inches diameter by $\frac{5}{16}$ -inch thick.

Futchells.

Futchells to be $49\frac{1}{2}$ inches extreme length, $21\frac{1}{2}$ inches long, $2\frac{1}{2}$ inches wide, and $1\frac{1}{2}$ inches thick, in front of futchell bed (including 18 inches for jams), and 28 inches long, $2\frac{1}{2}$ inches wide, tapering to $1\frac{1}{2}$ inches at end, and $1\frac{1}{2}$ inches deep, from front of futchell bed. Jaws of futchells to have an iron plate on bottom, full width of jaws and $1\frac{1}{2}$ inch thick, running full length of jaws, then to be oval $5\frac{1}{2}$ inches in length, 1 inch wide and $\frac{1}{2}$ inch thick, and forming a boss where it is bolted to futchell bed, then running oval 11 inches where it forms flat $1\frac{1}{2}$ inches wide and $\frac{1}{2}$ inch thick, and receives bolt coming through fifth wheel, and continues $13\frac{1}{2}$ inches, and then it is

tapered off to end of futchells. Futchells to have iron plates on inside of jaws $\frac{1}{2}$ inch thick, 2 inches wide, 18 inches long, and secured to jaw with screws, and to have a plate of iron $3\frac{1}{2}$ inches long, $\frac{1}{2}$ inch thick, and $1\frac{1}{2}$ inches wide on the outside of each jaw, secured by a screw in each and through which the pole-pin is to pass.

Futchell bed.

Futchell bed, $3\frac{1}{2}$ inches deep, $2\frac{1}{2}$ inches wide, 35 inches long, including $2\frac{1}{2}$ inches finish on either end; iron plate $\frac{1}{6}$ inch thick, bolted on under side full length and width of bed, extending along side bars to within $1\frac{1}{2}$ inches of splinter bar, where it is spliced to splinter bar plate by 2 bolts passing through each transom plate, male and female, $26\frac{1}{2}$ inches long, or of a sufficient length to suit futchell bed and fifth wheel. $2\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, secured by four $\frac{3}{8}$ -inch bolts with countersunk heads passing through bed and plate, with hole to receive a $\frac{3}{4}$ -inch king-bolt which is nutted and threaded on top with spring key above nut.

Chairs.

Chairs, or upper platform bars, consist of three bars 4 feet 5 inches long, center bar (which must have king-bolt plate on top 10 inches long) $2\frac{1}{2}$ inches at center and tapering to 2 inches at ends. Front and rear bars $1\frac{1}{4}$ inches thick. All three bars to be 6 inches deep, and cut away by degrees to reach the depth of $1\frac{1}{2}$ inches at the ends. Three bars framed across upper platform bars, running from front to back bar, one bar to rest opposite center of body and one to rest opposite each sill. These bars are fastened to body by $\frac{1}{2}$ -inch bolts passing through sills and bars at either end; center bar is bolted at back end to body with $\frac{1}{6}$ -inch bolts, also bolted to back and front upper platform bars with $\frac{1}{2}$ -inch bolts. Bars to be cut out between the bearings, as per drawing. The upper transom plate is to be secured by four bolts with countersunk heads passing through center bar of upper platform.

Fifth wheel.

Fifth wheel.—Two circles of iron 30 inches diameter, $1\frac{1}{2}$ inches wide, $\frac{3}{8}$ inch thick, with iron hoops $\frac{3}{8}$ inch wide, $\frac{1}{6}$ inch thick, shrunk on outer edge of upper half to receive lower half. The lower half is secured to futchells and futchell bed, with intervening wood blocks, by six bolts with countersunk heads. The upper half is secured to chairs by six bolts with countersunk heads.

Side bars.

Side bars, $1\frac{1}{4}$ inches wide and $1\frac{1}{2}$ inches deep, mortised into futchell bed and splinter bar, to have iron plates $\frac{1}{2}$ inch thick, full length and width of bars, securely bolted to them and welded plates under futchell bed.

Splinter bar.

Splinter bar, 4 feet 6 inches long, $1\frac{1}{2}$ inches deep in center, and $1\frac{1}{4}$ inches deep at ends, $1\frac{1}{2}$ inches wide, to rest on two (2) iron ferrules each 2 inches diameter and $1\frac{1}{2}$ inches deep and made of $\frac{1}{2}$ -inch iron, filled with wood on top of futchells, 2 inches from front end. The splinter bar to have a stay iron $1\frac{1}{2}$ inches below futchells (to receive block for draught spring) $1\frac{1}{2}$ inches wide and $\frac{3}{8}$ inch thick, extending 7 inches in length, with lugs extending upwards on outside of futchells to within $\frac{1}{2}$ inch of splinter bar, where they form $\frac{1}{6}$ inch round bolts and pass through splinter bar and are nutted on top; from the lugs on each side of futchells the stay iron is to be oval, $9\frac{1}{2}$ inches in length, 1 inch wide and $\frac{1}{6}$ inch thick, then forming flat and extending 2 inches, where it branches on to side bars and is spliced with plate of futchell bed as hereinbefore specified; then extending along splinter bar $2\frac{1}{2}$ inches, where eye passes through for swingle-tree attachment, then extending $1\frac{1}{2}$ inches, where lugs are formed to receive front side springs, then tapered off to ends of splinter bar. The splinter bar to have on top an iron plate $1\frac{1}{4}$ inches wide, $\frac{3}{8}$ inch thick, extending 15 inches from ends and 8 inches on side bars, securely bolted to each, and to form a roughened step 3 inches diameter on either end, also to have on top at center an iron plate 10 inches long, $1\frac{1}{4}$ inches wide, and $\frac{1}{2}$ inch thick.

Pole.

Tongue or pole to be $3\frac{1}{4}$ inches wide at front of jaws, and $2\frac{1}{4}$ inches at back end. $\frac{1}{2}$ inches thick, 9 feet 6 inches long from futchell to extreme front end, $1\frac{1}{4}$ inches square at front end, with pole-hook and strap-loops of $\frac{1}{2}$ -inch round iron, flattened at ends to

inch by $\frac{1}{4}$ inch, and not less than 7 inches long, bolted to front end of pole by two $\frac{1}{2}$ -inch bolts. A pole-stop of iron $1\frac{1}{2}$ inches wide, $\frac{1}{4}$ inch thick, to be placed on under side of futchells at their back ends to allow the pole to drop $1\frac{1}{2}$ inches below futchells at that point. The pole is connected with the wagon by a pin of $\frac{1}{4}$ -inch round iron passing through futchells and pole 7 inches from front end of futchells, and secured by a spring key.

Swingle-trees.

Swingle-trees 34 inches long, $2\frac{1}{4}$ inches wide, and $1\frac{1}{4}$ inches thick in center, $1\frac{1}{4}$ inches at ends, with $\frac{1}{4}$ -inch iron staple at center, passing through and fastened with screw and nut. Swingle-trees to be made of best hickory, and have a ferrule fastened on each end, and a cock-eye with ring $1\frac{1}{2}$ inches diameter inside, of $\frac{3}{8}$ -inch iron, screwed into each end three (3) inches, the screw of cock-eye to be $\frac{1}{4}$ -inch thick; the swingle-trees to be hung to an iron rod from the half elliptic spring back of splinter bar by a swivel attachment of iron, from the ends of spring to center of swingle-trees, the swingle-trees also to have iron plates where they strike the wheels to prevent wearing. The iron rod connecting swingle-tree with spring back of splinter bar is to pass through a oval shaped iron loop of $\frac{1}{4}$ -inch iron bolted to splinter bar opposite ends of half elliptic spring. The half elliptic spring above referred to is to be $1\frac{1}{4}$ inches wide, $39\frac{1}{2}$ inches extreme length, having five plates No. 3 oil-tempered steel.

Brake.

Brake (see drawing attached). The brake-arms "A" are clevised on the hangers to which front ends of hind side springs are fastened, the same $\frac{7}{16}$ -inch bolt passing through both and nutted on the inside; length of each arm 11 inches from center of outside eye to brake block. Diameter of iron $\frac{1}{4}$ inch at upper end and extending down within $1\frac{1}{4}$ inches of brake-block where it must be $1\frac{1}{8}$ inches diameter extending only $\frac{1}{2}$ inch to keep connecting rods "D" in place; the brake-blocks to be made of hickory $\frac{1}{4}$ inches thick and 2 inches wide and fastened on wrought-iron shoes with six (6) wood screws No. 16— $1\frac{1}{2}$ inches long; the fulcrum slips "L" are each made with an arm or journal for levers "C" to work on and fastened on the hind side spring 2 inches in front of axle, by two ends $\frac{1}{2}$ inch diameter passing through a coupling plate underneath spring block threaded and nutted, the spring-block to turn down $\frac{3}{8}$ inch to keep coupling in its place; also a keeper plate $1\frac{1}{2}$ inches wide by $\frac{3}{16}$ inch thick to be bolted on top of springs and pass under clips and bent up behind the back slips, and also in front of front slips, and of fulcrum slips to keep them from pulling forward; the fulcrum slips should not be less than $1\frac{1}{4}$ inches wide by $\frac{1}{4}$ inch thick, the arms to be $1\frac{1}{4}$ inches diameter extending out from springs $\frac{1}{2}$ inch, then to extend out $1\frac{1}{4}$ inches by full $\frac{1}{2}$ inch diameter, then to extend $\frac{1}{2}$ inch by $\frac{3}{8}$ inch for thread and have a $\frac{1}{4}$ -inch nut fitted on; these journals must be turned up in a lathe and be well fitted; the back levers "C" work on these journals, the lower ends being at journals $1\frac{1}{4}$ inches wide by $\frac{1}{16}$ inch thick, bent forward so that they will not strike the hubs of the hind wheels when in use; they are also close up to the shoulders of journals, while the longer ends are $1\frac{1}{2}$ inches wide by $\frac{1}{16}$ inch thick at journals at the outer side so that they will not strike the body where it connects with longitudinal rod "F" by $\frac{3}{8}$ -inch bolt; length of upper ends from center of journals to center of bolt 21 inches; length of lower ends from center of journals to center of bolt 6 inches where they connect with rods "D" by $\frac{7}{16}$ -inch bolt; length of rods "D" from center to center 25 inches and their diameter $\frac{1}{2}$ inch; length of rods "F" 7 feet, $\frac{1}{4}$ inch from center to center; the foot lever "G" is $1\frac{1}{2}$ inches wide by $\frac{1}{4}$ inch thick, $5\frac{1}{4}$ inches from center of hole tapered in width down to the circle of square hole where it connects with transverse bar and is fastened with $\frac{1}{2}$ -inch nut; the upper end is tapered in width to $1\frac{1}{4}$ inches from center of $\frac{1}{4}$ -inch hole where it turns inward $4\frac{1}{2}$ inches, then turns back 1 inch to keep driver's foot from slipping off; the transverse bar "K" is 5 feet 6 inches long between the inside of foot-lever and arm that connects with longitudinal rods, the arm to be turned up $4\frac{1}{2}$ inches in length from center of rod to center of holes, and to be $1\frac{1}{4}$ inches wide by $\frac{1}{4}$ inch thick; this bar must be $1\frac{1}{8}$ inches diameter, extending inward from the ends 3 inches to admit of grooves being cut $\frac{1}{4}$ inch deep by $\frac{1}{4}$ -inch wide to admit of wearing plates "H" which are let into the blocks under main sills flush with the wood and fastened with four (4) wood screws No. 14, 1 inch long; spring "Q" to be fastened on top rail at front to keep foot lever in position when not in use.

Stretcher rest.

A stretcher rest to be provided on the floor of the wagon constructed in the following manner: Two light half elliptic springs of two plates each $1\frac{1}{4}$ inches wide, by $\frac{3}{16}$ inch thick set 2 feet 7 inches center to center, on each side of wagon, each spring hinged at one end to a shoe which is secured to the floor by two $\frac{1}{4}$ -inch bolts; the

bolts by which the springs are hinged to the shoes are to pass through gun tubing eyes of springs: outside diameter of tubing is to be 1 inch and inside diameter $\frac{1}{2}$ inch to correspond with diameter of bolts: the heads of these bolts on sides of shoes next panels are to be let in flush with shoes. The other end of each spring will have brass roller $2\frac{1}{2}$ inches in diameter by $1\frac{1}{4}$ inches wide, to run on iron plate let into floor and secured to it by screws. The springs to sustain a roller bar of steel $\frac{1}{2}$ inch thick by $1\frac{1}{4}$ inches wide and 6 feet $\frac{1}{2}$ inch long, having four double tapered ash rollers, each 2 inches diameter, except the one hereinafter specified, placed as hereinafter directed and as shown in drawings, having iron wings or ferrules on ends $\frac{3}{4}$ inch wide by $\frac{1}{2}$ inch thick. The 1st and 2nd rollers from rear to be made each in two (2) equal sections and revolve on $\frac{1}{2}$ -inch gas pipe passing through their centers lengthwise: an iron washer 2 inches diameter by $\frac{1}{2}$ inch thick to be shrunk on the middle of this pipe between the sections, each section to have iron ferrules on ends $\frac{3}{4}$ inch wide by $\frac{1}{2}$ inch thick. Iron pins $\frac{1}{2}$ inch diameter to be welded in each end of pipe to project $\frac{1}{2}$ inch to set into roller-bar, the rollers to be kept permanently on the pipe by iron washers $1\frac{1}{4}$ inches diameter by $\frac{1}{16}$ inch thick properly riveted on to these iron pins. The 3rd & 4th rollers from the rear to be provided with iron pivots set firmly in their ends to revolve in roller bars. The 4th roller from rear to have a rubber washer $3\frac{1}{2}$ inches diameter outside and $\frac{1}{2}$ inch thick, to be set firmly on the center. The roller bar on the right side of ambulance wagon to be provided with three (3) U-shaped slots $\frac{1}{2}$ inch deep and $\frac{1}{2}$ inch wide: the roller bar on the left side of ambulance wagon to be provided with (3) $\frac{1}{2}$ -inch holes set $\frac{1}{2}$ inch from top edge of roller bar to receive pivots of 1st, 2nd & 4th rollers.

Height from bottom of floor to top of roller-bar to be 4 inches. The center of plate receiving the 3rd roller from rear end to be $\frac{1}{2}$ inch above top of roller bar and the slot of this plate to be deep enough to bring the 3rd roller in a line with the top of the other three rollers. The 3rd roller to be $\frac{1}{2}$ inch less in diameter than the other three (See drawing attached, showing position of rollers and method of attaching the third roller from rear end of wagon to spring.)

Painting.

All parts of the wood work of the body, with the exception of the bows, ribs, ridge poles, and curtain rails, will be painted dark olive-green. A first coat of heavy boiled linseed oil will be laid on hot. When this priming is thoroughly dry three successive coats of the olive-green paint will be laid on, mixed with boiled linseed oil, without admixture of turpentine or varnish. Sufficient time for drying of each coat will be allowed. All iron work will be painted black, with three (3) coats of lead paint mixed with boiled linseed oil. On the panels of the upper sections, midway between the second and third bows from the front, the letters U. S., six inches in height, will be conspicuously painted in bright yellow, of the tint of the hospital flag. On the panels, between the first and second bows, the red Geneva or Greek cross will be painted on a white ground. All the wood work of the running gear will be painted in the same manner as that of the body of the wagon.

General provisions.

Spokes and wheel boxes to be well wedged; all tenons to be secured with wooden pins except those of bows: all welds to be made smooth and strong: corners of felloes to be rounded between spokes: lower studs and sills to be chamfered and neatly finished: all clips to be neatly finished with cross-tie washers 1 inch by $1\frac{1}{2}$ inches: sharp corners of bows to be removed: covering of seats and lazy-backs to be well fastened.

All wood and iron work to be of best material: sills, cross-bars, studs, rails, felloes, boards of body to be of best seasoned white oak: frame work of upper section of body, bows, lazy-back, curtain rails, and cleats to be of best seasoned ash: all panels to be of best seasoned yellow poplar: wood work of running-gear to be of best hickory.

Parts to be interchangeable.

The ambulance wagon is to be so constructed that the several parts of one wagon will be interchangeable with any other wagon, so as to require no numbering or arrangement in putting together: and the work, in all its parts, executed in the best workmanlike manner.

The wagon may be prepared for packing by removing the front load, the top and back of driver's seat, front lazy-back, curtain rails, ridge pole, and bows, which will allow the upper panels to lay on the tail gate and front bar, and all can be packed on one side of lower part of body.

Glate 1

SPECIFICATIONS FOR HAND STRETCHER FOR THE AMBULANCE WAGON.

Side poles of ash [see drawings, Fig. 1b], six (6) feet two (2) inches long and two (2) inches square, with a groove one (1) inch wide and one and three-eighths ($1\frac{3}{8}$) inches deep, and twenty-one and a half ($21\frac{1}{2}$) inches in length at each end, leaving nine-sixteenths ($\frac{9}{16}$) inch on inside and seven-sixteenths ($\frac{7}{16}$) inch outside.

Handle pieces of ash, thirteen (13) inches long, fifteen-sixteenths ($\frac{15}{16}$) of an inch wide, one and three-sixteenths ($1\frac{3}{16}$) inches deep; of which six and one-fourth ($6\frac{1}{4}$) inches is rounded and shaped for hand, as indicated in the drawing [Fig. 1b]. They are retained in the groove by two (2) pieces of iron five-eighths ($\frac{5}{8}$) inch wide, one-eighth ($\frac{1}{8}$) inch thick, and two (2) inches long, which are let in flush on the bottom of the side poles, the middle of the first piece being seven-eighths ($\frac{7}{8}$) of an inch from the end of the pole; the middle of the second piece six and one-half ($6\frac{1}{2}$) inches from the end of the pole; and are fastened by two (2) rivets three-sixteenths ($\frac{3}{16}$) of an inch each. An iron pin, one-fourth ($\frac{1}{4}$) of an inch in diameter and projecting one-eighth ($\frac{1}{8}$) of an inch, is inserted in the under side of the handle seven and one half ($7\frac{1}{2}$) inches from the front end of the handle, to come in contact with the first iron piece when the handle is extended and thus prevent its further extension.

A T-plate, indicated in Fig. 1a, supports the back end of the handle when telescoped with its center eleven and three-eighths ($11\frac{3}{8}$) inches from the end of the pole, with a one-fourth ($\frac{1}{4}$) inch hole one and one-eighth ($1\frac{1}{8}$) inches toward the front of the pole to receive pivot for stretch irons, and three-sixteenths ($\frac{3}{16}$) inch hole at the other two ends; the end toward the center is two (2) inches long with the hole one-half ($\frac{1}{2}$) inch from the end; in the cross-branch of the T-piece the hole is one-fourth ($\frac{1}{4}$) inch from the end.

The legs are of ash, one and three-sixteenths ($\frac{3}{16}$) inch deep, fifteen-sixteenths ($\frac{15}{16}$) of an inch wide, seven and three-fourths ($7\frac{3}{4}$) inches long, and work on an iron pivot one-fourth ($\frac{1}{4}$) of an inch in diameter, which passes through the pole twelve and one-half ($12\frac{1}{2}$) inches from the end and three-fourths ($\frac{3}{4}$) of an inch from the under side of the pole. The legs are held in position when open or closed by a spring six (6) inches long by one-half ($\frac{1}{2}$) an inch wide, which tapers from one-eighth ($\frac{1}{8}$) of an inch at the point let in the groove, to one-sixteenth ($\frac{1}{16}$) of an inch at the point resting on the top of the leg. The top of the leg is bound for a distance of two and a half ($2\frac{1}{2}$) inches by an one-eighth ($\frac{1}{8}$) inch iron strap, which is secured three-quarters ($\frac{3}{4}$) of an inch from its end by a pin of one-fourth ($\frac{1}{4}$) inch iron. [See Fig. 1b.]

Stretch-irons, curved as indicated in the drawing, Figs. 2 and 4, are of wrought-iron, three-fourths ($\frac{3}{4}$) of an inch wide, one-third ($\frac{1}{3}$) of an inch thick, and twenty-one and a half ($21\frac{1}{2}$) inches long from out to out, hinged in the middle, and doubling on themselves three and a half ($3\frac{1}{2}$) inches, as indicated in Fig. 3; one and a half ($1\frac{1}{2}$) inches from either end of the stretch-irons is a one-quarter ($\frac{1}{4}$) inch hole to receive the iron pivot running through the T-plate, as mentioned above.

Canras of fifteen (15) ounce U. S. Army duck, with a hem one (1) inch deep at both ends, turned under and tacked securely to the side of the side poles their entire length, viz, six (6) feet four (4) inches.

Buckled strap twenty-five (25) inches long and one (1) inch wide, to secure litter when folded.

Approved by the Secretary of War May 25, 1881.

WAR DEPARTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, May 27, 1881

M.

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE,
Washington, D. C., March 1, 1881.

Under the authority of the Secretary of War, dated February 11, 1881, the specifications for Army cast-iron coal heater No. 7, embraced in the report of the board of officers on the subject of stoves and ranges for Army use, published by this office in pamphlet form May 25, 1876, is hereby amended by striking out the words "The grate is in two parts, (halves,)" on page 7 of the pamphlet, and substituting therefor the words "The grate is in three pieces;" so that the sentence will read: "The grate is in three pieces, so that it can be readily removed; it rests on a $\frac{3}{4}$ -inch ring or shoulder inside of the stove."

This change is made in order that the grate can be shaken and cleaned.

The drawing appended hereto is substituted for the drawing "P," Army cast-iron coal heater No. 7, contained in the pamphlet hereinbefore mentioned.

To shake the grate, insert a poker in hole "h" (see drawing) and move it up and down.

To clean the grate and remove clinker, tilt the revolving part of the grate into a vertical position.

The following are the weights of the Army cast-iron wood and coal heaters of regulation patterns, the weight of coal heater No. 7 being with the new grate :

Wood heaters.....	{ No. 1, 460 pounds No. 2, 1080 pounds No. 3, 1145 pounds
Coal heaters.....	{ No. 6, 243 pounds No. 7, 1002 pounds

M. C. MEIGS,

Quartermaster-General, Bvt. Major-General, U. S. A.

MODIFICATION OF SPECIFICATIONS FOR WATER-TANKS OF ARMY COOKING-RANGES, NOS. 1 AND 2.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 3, 1879.

Under authority of the Secretary of War, the water-tanks of the Army cooking-ranges, Nos. 1 and 2, will hereafter be made of 18-pound sheet-copper, heavily tinned inside, and black enameled outside to correspond with the ranges, instead of galvanized iron, and the specifications for these ranges, published by this office May 25, 1876, are hereby modified accordingly.

M. C. MEIGS,

Quartermaster-General, Bvt. Major-General, U. S. A.

SPECIFICATIONS OF FURNITURE FOR THE NOS. 1 AND 2 ARMY COOKING-RANGES, ADOPTED BY CIRCULAR FROM QUARTERMASTER-GENERAL'S OFFICE, DATED MAY 25, 1876.

Range No. 1.

The wash-boiler to be of 4 XXXX bright charcoal tin, with oval ends, and drop bottom $\frac{1}{2}$ inch deep, of 18 oz. copper; length $21\frac{1}{2}$ inches, width $10\frac{1}{2}$ inches out to out; extreme depth inclusive of drop bottom, 14 inches. Capacity 11 gallons.

Ears of same material as boiler; to be $2\frac{1}{2}$ inches wide, 1 inch long, riveted on and doubled to take handle.

Handles of No. 5 iron wire, 5 inches long, $1\frac{1}{2}$ inches wide out to out. Top to be edged over No. 5 iron wire.

Cover to be of 2 XX hundred plate bright charcoal tin, with usual pitch.

Lifting-handle, $1\frac{1}{2}$ inches wide, with creased edges, to form one-half of circle $3\frac{1}{2}$ inches diameter; to be soldered and riveted on.

Rim of cover 1 inch deep.

The coffee-boiler to be of 3 XXX hundred plate bright charcoal tin, with drop bottom $\frac{1}{2}$ inch deep, of 18 oz. copper. Diameter at base $8\frac{1}{2}$ inches, tapering to $5\frac{1}{2}$ inches at top; extreme depth $9\frac{1}{2}$ inches, inclusive of drop bottom. Capacity $1\frac{1}{2}$ gallons. Top to be edged over No. 9 iron wire.

Boiler to have substantial ears $1\frac{1}{2}$ inches long, $1\frac{1}{2}$ inches wide, finished, tapering $\frac{1}{2}$ inch at top. Ears to be riveted on.

Bail to be of No. 8 iron wire.

Handle to be $1\frac{1}{2}$ inches wide at top, tapering to $\frac{1}{2}$ inch at lower end, with $2\frac{1}{2}$ -inch arch; extreme length $5\frac{1}{2}$ inches. To be edged over No. 9 iron wire, soldered and riveted to boiler.

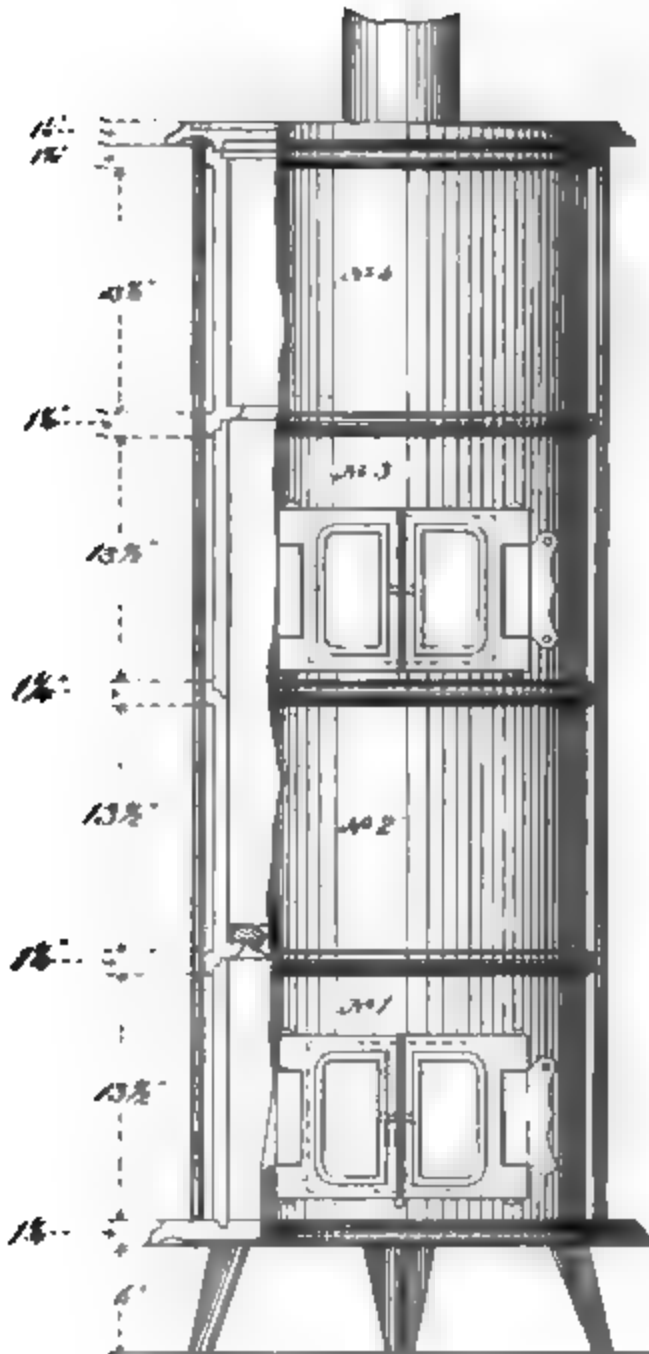
Lip to project $1\frac{1}{2}$ inches at top; width at boiler to be $2\frac{1}{2}$ inches, tapering to 1 inch at point; to be edged and double-creased and applied to boiler with three rivets. To have not less than thirty perforations on inside, properly spaced.

Cover to be of 2 XX hundred plate bright charcoal tin, with $\frac{1}{2}$ -inch rim.

Lifting-ring to be 1 inch diameter, $\frac{1}{2}$ inch wide, edged and creased; clinched through cover and soldered.

The steamer to be of 2 XX hundred plate bright charcoal tin, $10\frac{1}{2}$ inches diameter out to out, depth $4\frac{1}{2}$ inches. Top to be edged over No. 8 iron wire. Bottom to be without rim, pinned to body; to have three triangular rests arranged to fit pot, and

P

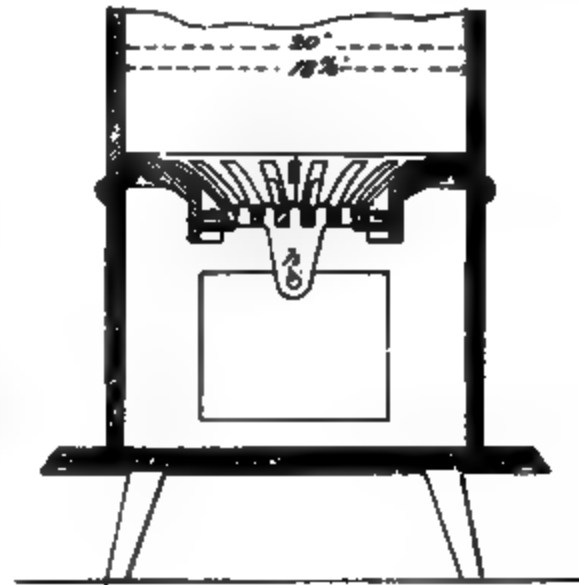


Dimensions

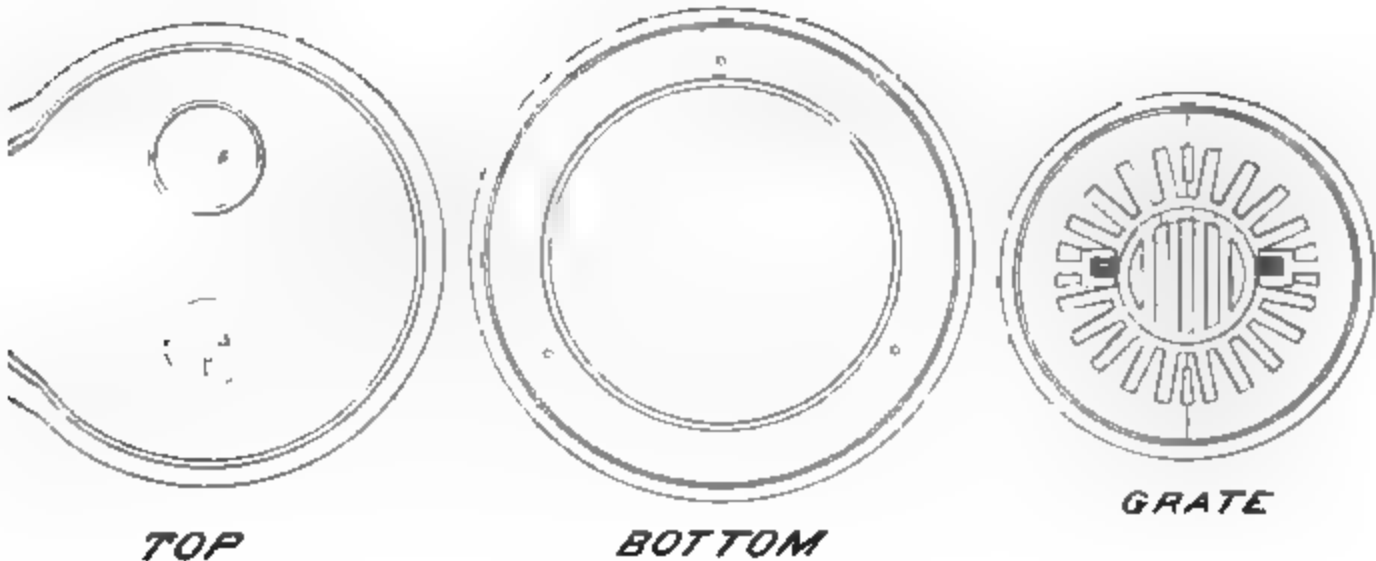
Height 5 Feet 7 1/2 Inches
Diameter 20 Inches
Thickness of Iron 3/4"
Cylinders 13 1/2" high
Size of Door 8" x 10"
Thickness of Door 1/2"
No. 1 & 3, No. 2 & 4 can be changed.

Use

To start the grate put the poker in the hole & move the poker up & down.
To remove clinker push the remaining part of the grate till it stands vertical. Then through the upper door push off clinker with the poker.



ARMY CAST IRON COAL HEATER. No. VII.



Feet 12 10 8 6 4 2 0 1 2 Feet

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1

not less than fifty-seven (57) perforations, each $\frac{1}{8}$ inch diameter, properly spaced to be $1\frac{1}{2}$ inches wide, $3\frac{1}{2}$ inches long, with $1\frac{1}{2}$ inch arch at bottom. To be double creased and soldered on.

to be of same material as steamer, with usual pitch, and $\frac{1}{2}$ -inch rim.

ring-handle to be $1\frac{1}{2}$ inches wide, and to form a half circle of $3\frac{1}{2}$ inches diameter, double edged and creased, soldered and riveted on.

stove-kettle to be of best quality cast iron, not less than $\frac{1}{8}$ inch thick; size, No. 1 standard pattern, with sliding lid; capacity $1\frac{1}{2}$ gallons.

to be of $\frac{1}{2}$ -inch half oval iron.

to be not less than $8\frac{1}{2}$ pounds.

skillets to be of No. 22 smooth, cleaned, charcoal sheet-iron, without seams, without substantial folds at corners, and of two sizes, as follows:

Small skillets to be $15 \times 16\frac{1}{2}$ inches, two (2) $7\frac{1}{2} \times 15\frac{1}{2}$ inches, measurement on bottom outside; all skillets $1\frac{1}{2}$ inches deep, with 1 inch flare on all sides. Large pan to be edged over No. 8 iron wire.

to be 2 inches long, $1\frac{1}{2}$ inches wide, doubled over handles and applied with two rivets each.

to be of No. 7 iron wire; length $3\frac{1}{2}$ inches, width $1\frac{1}{2}$ inches out to out.

to cover to be of 2 XX hundred plate bright charcoal tin, $10\frac{1}{2}$ inches diameter, not less than four corrugations on surface.

to ring to be of No. 11 iron wire, clinched through and soldered.

to be of best quality cast iron, not less than $\frac{1}{8}$ inch thick, of standard diameter at top $10\frac{1}{2}$ inches out to out, depth at center $9\frac{1}{2}$ inches. Capacity 2 gallons each.

to be of No. 4 iron wire.

to be not less than $8\frac{1}{2}$ pounds.

skillets to be of best quality cast iron, not less than $\frac{1}{8}$ inch thick; diameter, 8 inches at bottom, 9 inches; depth $1\frac{1}{2}$ inches; flare of sides $\frac{1}{2}$ inch.

to be left side from handle, of proper projection.

to be 5 inches long, curved; greatest width $1\frac{1}{2}$ inches.

to weigh not less than $3\frac{1}{2}$ pounds each.

skillets to be of best quality cast iron, not less than $\frac{1}{8}$ inch thick; diameter, 8 inches, 9 inches; depth to be $\frac{1}{2}$ inch. To have rim formed in casting to fit 8-inch stove.

to correspond in size and pattern to those of skillets.

to be of griddles to be not less than $2\frac{1}{2}$ pounds each.

to be of heater to be of best quality cast iron, not less than $\frac{1}{8}$ inch thick, with oval shape, length, out to out, exclusive of handle, $19\frac{1}{2}$ inches; width, out to out, $9\frac{1}{2}$ inches; depth $1\frac{1}{2}$ inches, with slight flare of sides.

to be 1 inch wide, with $\frac{3}{8}$ -inch molded edge.

to be of handles to be formed in casting, not less than $2 \times 1\frac{1}{2}$ inches, with openings $1 \times \frac{1}{2}$ inch.

to be of heater to be not less than $5\frac{1}{2}$ pounds.

to be of stove-pipe and elbow to be of best quality sheet-iron, No. 24, size 7 inch; pipe to be double-seamed, riveted at ends, beaded $1\frac{1}{2}$ inches from top. Elbow to be curved and made of not more than five pieces, the pieces to be substantially riveted.

Range No. 2.

to be of steam-boiler to be identical in material, style and finish with that for No. 1 range; diameter at base $11\frac{1}{2}$ inches, width $11\frac{1}{2}$ inches out to out, extreme depth 14 inches, inclusive of bottom. Capacity 14 gallons.

to be of coffee-boiler to be identical in material, style and finish with that for No. 1 range; diameter at base $11\frac{1}{2}$ inches, tapering to 7 inches diameter at top; extreme depth 14 inches, inclusive of drop in bottom. Capacity 3 gallons.

to be 14 inches long, $1\frac{1}{2}$ inches wide, tapering to 1 inch at top.

to be of No. 7 wire.

to be 14 inches wide at top, tapering to $\frac{1}{2}$ inch, with 3-inch arch.

to project $2\frac{1}{2}$ inches, width at top $2\frac{1}{2}$ inches, tapering to $1\frac{1}{2}$ inches at point. To have not less than forty-two perforations on inside, properly spaced.

to be of steamer to be identical in material, style, and finish with that for No. 1 range; diameter at top $11\frac{1}{2}$ inches out to out; depth $4\frac{1}{2}$ inches; bottom to have not less than 50 perforations, each $\frac{1}{8}$ inch diameter, properly spaced.

to be of stove-kettle to be identical in material and style with that for No. 1. Size to be standard, capacity 2 gallons.

to be of kettle to be not less than $9\frac{1}{2}$ pounds.

to be of skillets to be identical in material and finish with those for No. 1 range. Sizes as follows:

One (1) $1\frac{3}{4} \times 19\frac{1}{4}$ inches; two (2) $7\frac{1}{4} \times 19\frac{1}{4}$ inches, measurement on bottom, outside. Large pan to be $3\frac{1}{4}$ inches deep: small pans $2\frac{1}{4}$ inches deep, all 1-inch flare.

Large pan to have reinforcing bands $\frac{1}{4} \times \frac{1}{8}$ -inch wrought-iron on each side, well secured.

Ears to be $2\frac{1}{2}$ inches long, $1\frac{1}{4}$ inches wide.

Handles of large pan to be of No. 4, of small pans of No. 5 iron wire, all $3\frac{1}{4}$ inches long, $1\frac{1}{2}$ inches wide out to out.

The pot-cover to be identical in material and style with that for No. 1 range; diameter $11\frac{1}{2}$ inches.

The pots to be identical in material and style with those for No. 1 range; diameter at top $11\frac{1}{2}$ inches out to out; depth at center $10\frac{1}{2}$ inches. Capacity $3\frac{1}{2}$ gallons each.

Weight to be not less than 10 pounds each.

The skillets to be identical in material and style with those for No. 1 range; diameter, out to out at bottom, $10\frac{1}{4}$ inches; depth $2\frac{1}{4}$ inches; flare of side $\frac{1}{4}$ inch.

Handle to be $5\frac{1}{2}$ inches long, curved; greatest width $1\frac{1}{2}$ inches.

Skillets to weigh not less than 5 pounds each.

The griddles to be identical in material and style with those for No. 1 range; diameter $10\frac{1}{4}$ inches out to out; depth $\frac{1}{4}$ inch; to have rim to fit 9-inch opening.

Weight to be not less than $3\frac{1}{2}$ pounds.

The iron-heater to be identical in material and style with that for No. 1 range: length out to out, exclusive of handle, $21\frac{1}{4}$ inches; width, out to out, $10\frac{1}{8}$ inches, inclusive of flange; depth $1\frac{1}{8}$ inches.

Weight to be not less than $6\frac{1}{2}$ pounds.

The stove-pipe and elbow to be identical in material and workmanship with that for No. 1 range, except that elbow must be formed of not more than four pieces. Size 8 inches.

GENERAL REMARKS.

All work to be done in the best workmanlike manner. All work on the tin furniture, unless otherwise specified, to be double seamed and soldered. All castings to be smooth. Tea-kettle and pots to be blacked on outside. Sizes of wire will be governed by the J. R. Brown & Sharpe American Standard Gauge.

N.

[General Orders No. 50.]

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, May 24, 1881.

By direction of the Secretary of War the following orders are published for the information of the Army, and paragraphs 2150 and 2184 to 2191, inclusive, of the codified regulations (now in the hands of the printer), are modified accordingly:

I. The Quartermaster's Department will provide, with the appropriation for "regular supplies" for the fiscal year beginning July 1, 1881, lamps, lanterns, mineral oil, wicks, and lamp chimneys at the various military posts and stations, and will, as each post and station is supplied, relieve the Subsistence Department of the duty of furnishing all lights heretofore supplied to the Army by the latter department, except as hereinafter provided.

II. The issue to troops after July 1, 1881, of candles as a component part of the ration is hereby, by authority of the President, under section 1146, Revised Statutes, discontinued in all cases where illumination with mineral oil shall be supplied under the provisions of this order.

III. The Subsistence Department will continue the issue of the established ration of candles to troops in the field, on detached service, &c., where lamps cannot be used.

IV. In stables candle-lanterns only should be used, for which candles will be issued by the Subsistence Department; the number of lanterns for use in stables at any post to be such as the commanding officer, with the approval of the department commander, shall require, and the quantity of candles for the purpose to be such as the commanding officer shall certify and order as necessary. The candle-lanterns will be supplied by the Quartermaster's Department.

V. Lamps having one or two $\frac{1}{2}$ -inch argand burners will be provided in quantities as follows, viz:

1. To troops in barracks and quarters, and in hospitals, at the rate of one burner

for every ten men or fraction thereof when the fraction is over one-half of this number, and a lamp with single burner for each of the non-commissioned staff officers and each first sergeant.

2. For the guard-houses, post school-rooms when used at night, post reading-rooms, post libraries, and the authorized offices, a lamp with single burner for each room; and for post hospitals, except sick wards, such number of burners as may be necessary, to be regulated by the post surgeon and post commander, not exceeding one burner for each room.

3. Post chapels, when used at night, will be lighted by lamps transferred from other rooms where not at the time in use.

VI. Oil lanterns will be issued as follows, viz: For the illumination of posterns, sally-ports, passage-ways, store-houses, or other parts of military posts exterior to quarters and barracks, which, for purposes of police, protection of public property, or the proper performance of other garrison duties, the commanding officer of the post, with the approval of the department commander, shall require to be lighted, such number of oil lanterns as the department commander shall in writing authorize for the purpose will be furnished upon requisitions approved by the commanding officer of the post, a copy of the authority of the department commander to be furnished by the commanding officer to the issuing officer, for file with the vouchers upon which the issues are made. Issues of oil, wicks, and chimneys for the purpose will be made by issuing officers on special requisitions, in duplicate (form annexed), designating the number and location of lights for which required, one copy of which is to be filed with the voucher on which the issues are made.

VII. Mineral oil having a flash point not lower than 135° Fahr. will be supplied for the lamps and oil lanterns herein provided for.

VIII. The rate of issue of mineral oil will be as follows: For all lamps in barracks, reading-rooms, school-rooms, and other places where the lights are required to be extinguished at taps, at the rate per burner of nearly two ounces avoirdupois for each hour of authorized illumination. A gallon of standard oil weighs one hundred and four ounces, or six and one-half pounds avoirdupois. In making estimates and requisitions quartermasters will calculate at the rate of one gallon of oil for fifty-two hours' use of each burner. For all oil lanterns, such quantities as the commanding officer shall order and certify as necessary, regard by him being had to the burning capacity of the lantern and the daily number of hours of authorized illumination.

IX. The hours during which lamps and oil lanterns may be kept lighted at each post will be such as the commanding officer thereof, with the approval of the department commander, may announce.

X. Post quartermasters will, except as herein otherwise ordered, issue lamps, lanterns, oil, wicks, and chimneys upon requisitions approved by the post commander.

XI. It shall be the duty of the officer inspecting the barracks at morning inspection to ascertain that all lamps in use have been filled and made ready for lighting. These lamps are never to be filled after dark.

XII. Officers of the Army are not entitled to lights in their quarters at public expense, but they may buy from the Quartermaster's Department, at contract cost, such moderate quantity of standard mineral oil and such lamps, wicks, and chimneys, of adopted patterns, as may be needed in the rooms actually occupied by themselves and families. This privilege is limited to the lamps, oil, wicks, and chimneys of patterns, kinds, and qualities like those provided by contract for use of the troops.

XIII. All regulations and orders in conflict with these orders are hereby revoked.
By command of General Sherman:

R. C. DRUM,
Adjutant-General.

FORM No. 44½.

Special requisition for oil, &c., for illuminating purposes at ——— for the period commencing ———, 18—, and ending ———, 18—.

Date.	Article.	Quantity.	Number and location of lights.
1881. July 1	Oil	One barrel (or other package, or—— gallons.)	1 lantern for subsistence store-house.
	Wicks		1 lantern for postern.
	Chimneys		

I certify that the above articles and quantities are necessary for the public service for the purposes stated. The ——— quartermaster will issue the required articles to ——— ———, who will receipt for and have charge of their use.

Commanding Post.

Received at ——— this ——— day of ———, 18, from ——— ———, ——— quartermaster, all the articles in full of the above return.

—
O.

SPECIFICATIONS FOR LAMPS FOR MILITARY POSTS.

The lamps shall be of two patterns: The pendent two-burner and the single-burner bracket lamp, and are intended to burn the Army standard mineral oil of flash point not less than 135° Fahrenheit.

PENDENT TWO-BURNER LAMP.

Form and material.—To be of form and materials according to the standard sample.

Font-holder.—The font-holder (part No. 1) to be made of sheet brass No. 22 (American standard gauge), and to be put together with hard solder, i. e., to be brazed and spun over to harden and stiffen the holder. Diameter at top, four and a half ($4\frac{1}{2}$) inches; at base, two and a half ($2\frac{1}{2}$) inches; at centre, three and five-eighths ($3\frac{5}{8}$) inches, gradually increasing and diminishing respectively to the above dimensions. The top to be slightly flared and its edge turned over to form a bead one-eighth ($\frac{1}{8}$) of an inch in diameter. Holes for wire arms to be one-fourth ($\frac{1}{4}$) of an inch in diameter, and to be on opposite sides of the holder, at a distance of one (1) inch from the top. Air vent-hole, one-eighth ($\frac{1}{8}$) of an inch in diameter, pierced one and five-eighths ($1\frac{5}{8}$) inches from the top. Arms (part No. 2) to be of No. 3 standard gauge brass wire, drawn hard, with eyes bent on ends one-half ($\frac{1}{2}$) inch in diameter, tips pointed. Base of arms to pass through cast and turned brass sockets (part No. 3) and be securely riveted on interior of font-holder. The brass socket to be one (1) inch long, three-fourths ($\frac{3}{4}$) of an inch diameter at base, one-half ($\frac{1}{2}$) inch diameter at smaller end, and be milled off so as to fit surface of font-holder and be soft-soldered to it. Spread of arms about eleven (11) inches. Bottom (part No. 4) to be a brass casting, turned on the interior so as to fit lower edge of font-holder, and be turned, all on the outside. The inside surface at the branch-holes to be raised to a height of about one-fourth ($\frac{1}{4}$) of an inch, full, to afford proper support to the branches when connected. The holes for branches to be of proper size, and to be one and nine-sixteenths ($1\frac{9}{16}$) inches apart, measured from centre to centre. This bottom casting to weigh not less than five and one-half ($5\frac{1}{2}$) ounces, and be attached to the font-holder with soft-solder.

Branches.—Two branches (part No. 5) to be made from brass tube of gauge No. 14 American standard, one-half ($\frac{1}{2}$) inch outside diameter, and weighing about four and a half ($4\frac{1}{2}$) ounces to the foot. Soft-soldered to the bottom of font-holder, and extending from it in a curve to the burners, to which they shall be attached also with soft solder. The burner end of each branch to be provided with a cast connection (part No. 6), milled and fitted to same, so as to form a strong and tight joint. Distance between centre of burner and centre of font-holder, eight and one-half ($8\frac{1}{2}$) inches. Depth of curve of branch about four (4) inches from bottom of font-holder.

The suspending supports (part No. 7) to consist of two (2) brass wire rods and a ring, all of gauge No. 9. The rods to be fourteen and three-quarter ($14\frac{3}{4}$) inches long when finished, bent in half ($\frac{1}{2}$) inch eyes on ring, and having half ($\frac{1}{2}$) inch S hooks, with tapered points on ends to hold the font-holder arms. Inside diameter of ring one and a half ($1\frac{1}{2}$) inches.

Burner.—Argand burner, according to pattern. Diameter of oil-reservoir (part No. 8), one (1) inch, gauge No. 26. Length, five (5) inches; pitch of threads, two (2) to the inch; depth of thread, three thirty-seconds ($\frac{3}{32}$) of an inch; width of thread three thirty-seconds ($\frac{3}{32}$) of an inch; gauge of metal where oil-drip screws on, No. 21, made from seamless tube. Centre tube (part No. 9), five-eighths ($\frac{5}{8}$) of an inch diameter, gauge No. 26; length, five and a half ($5\frac{1}{2}$) inches, attached to oil-reservoir with soft solder. Oil-drip (part No. 10), one and three-fourths ($1\frac{3}{4}$) inches in diameter, and one and one-fourth ($1\frac{1}{4}$) inches deep, exclusive of knob; gauge of top, No. 20, of bottom shell, No. 24, the latter to be provided with a cast-brass knob, and be well filled with solder, to pre-

vent denting. Wick-raising tube (part No. 11), four and three-fourths (4 $\frac{3}{4}$) inches long, and of diameter to fill oil-reservoir; top closed in to seven-eighths ($\frac{7}{8}$) of an inch diameter, seamless tube. Chimney-holder (part No. 12), a seamless shell, two and one-thirty-second (2 $\frac{1}{32}$) inches in diameter, outside, gauge No. 25; height, one (1) inch; shell made to slip chimney-holder (part No. 13), according to pattern, gauge No. 24; cone to fit shell, gauge No. 24. Tube-slide (part No. 14), of gange No. 26, to fit over thread of reservoir, and be clinched fast to burner-shell; top part to be closed in and riveted to wick-raising tube. The chimney-holder to be made detached from shell, so that it may be lifted off with chimney when lighting lamp.

Reflector.—A brass reflector (one for each lamp) part No. 15, nickle plated, gauge No. 25; diameter, ten (10) inches; depth, three and one-half (3 $\frac{1}{2}$) inches; edge turned over to form a one-eighth ($\frac{1}{8}$) inch bead. Chimney-hole, two and one-fourth (2 $\frac{1}{4}$) inches in diameter. Arms of No. 9, hard brass wire, riveted to a solid ring, which shall be two and one-thirty-second (2 $\frac{1}{32}$) inches in diameter (inside), five-sixteenths ($\frac{5}{16}$) of an inch deep, and No. 13 gauge; the ends of arms to be drilled, tapped, and fastened to reflector with screws.

Font.—A heavy flint glass oil-font of form and dimensions according to pattern, about eleven (11) inches high by about four and a half (4 $\frac{1}{2}$) inches diameter at widest part, the top to be flattened so that the font will stand on a level surface unsupported while being filled; to have a bead or shoulder around it at proper distance from the top to support it on the upper edge of font-holder when in position; to have an opening at bottom, with funnel-shaped mouth, for convenience in filling, provided with self-acting valve in conformity with drawings and models. Capacity of font three (3) pints.

Chimneys.—For each burner a chimney of the best flint glass according to pattern; length about ten and one-half (10 $\frac{1}{2}$) inches; diameter at base (inside) one and three-fourths (1 $\frac{3}{4}$) inches, with shoulder at height of about two and one-eighth (2 $\frac{1}{8}$) inches; upper flue about one and one-eighth (1 $\frac{1}{8}$) inches diameter.

The various parts of the lamp to be uniform, so that those of one will fit another, and the whole to correspond in design, finish, and construction with the drawings and the standard sample, and to be in no particular inferior to the latter. Where any differences are found to exist between the drawings and sample, the latter shall govern.

Each lamp when delivered shall be provided with wicks and be in complete order and ready for use upon being filled with oil.

For the guidance of manufacturers the weights of the various parts of the lamp are given below :

No. of the part.	Name of part.	Pounds.	Ounces.
1	One font-holder.....		13 $\frac{1}{2}$
2	Two font-holder arms.....		3 $\frac{1}{2}$
3	Two font-holder arm sockets.....		1 $\frac{1}{2}$
4	One font-holder bottom.....		5 $\frac{1}{8}$
5	Two branches.....		10 $\frac{1}{8}$
6	Two branch connecting sockets.....		1 $\frac{1}{2}$
7	Suspending supports.....		5 $\frac{1}{8}$
8	Two oil-cylinders.....		2 $\frac{1}{4}$
9	Two centre tubes.....		2 $\frac{1}{2}$
10	Two oil-drips.....		2 $\frac{1}{8}$
11	Two wick-raising tubes.....		2
12	Two tube slides.....		1 $\frac{1}{2}$
13	Two shells.....		3
14	Two chimney holders.....		2
15	Two chimneys.....		7 $\frac{1}{8}$
16	Reflector (one).....		10 $\frac{1}{2}$
	Glass font (one)—not less than.....	2	
Total weight of lamp complete.....		6	10

Exclusive of the glass parts (the font and chimneys), which are liable to vary considerably in weight, the average lamp should weigh, when finished, about four pounds and two and a half ounces (4 lbs. 2 $\frac{1}{2}$ ozs.).

SINGLE-BURNER BRACKET LAMP.

Font-holder.—The font-holder to be as described for double-burner lamps, except that it be drawn without wire arms, and have but one branch and burner.

Other parts.—The burner, glass font, branch, chimney, and reflector to be as described for the double-burner lamp.

Bracket.—A japanned, malleable-iron supporting bracket, with socket to receive font-holder, according to the standard sample. Weight of bracket about thirteen ounces (13 ozs.).

The weight of the bracket lamp to be the same as given for the double-burner pendant lamp, deducting that of the suspending supports, the arms of font-holder, and one branch, with its burner and chimney, and adding that of the bracket—making its average weight (exclusive of font and chimney) about three pounds and eight ounces (3 lbs. 8 ozs.).

(Signed)

JOHN F. RODGERS,
Captain and M. S. K., U. S. A.

PHILADELPHIA DEPOT OF THE QUARTERMASTER'S DEPARTMENT.

Philadelphia, October 7, 1881.

P.

[General Orders No. 35.]

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, April 12, 1881.

The following order, received from the War Department, is published for the information of the Army:

In order to carry into execution the act approved May 1, 1880, and so much of the act approved March 3, 1881, entitled "An act making appropriations for sundry civil expenses of the government for the fiscal year ending June 30, 1882, and for other purposes," as provides for "observation and exploration in the Arctic Seas: for continuing the work of scientific observation and exploration on or near the shores of Lady Franklin Bay, and for transportation of men and supplies to said location and return, twenty-five thousand dollars," it is ordered:

1. First Lieut. A. W. Greely, Fifth U. S. Cavalry, acting signal officer, having volunteered for the expedition, shall take command of the expeditionary force, now organizing under said act, to establish a station north of the 81st degree of north latitude, at or near Lady Franklin Bay, for the purpose of scientific observation.

2. Lieutenant Greely shall have authority to contract for and purchase within the limits of the appropriation the supplies and transportation deemed needful for the expedition; and the appropriation for this purpose, made by the act approved March 3, 1881, shall be drawn from the Treasury and disbursed, upon proper vouchers, by the regular disbursing officer of the Signal Service, under the direction of the Chief Signal Officer.

3. The force to be employed in the expedition shall consist of two other officers, who may volunteer their services; twenty-one enlisted men, who may volunteer from the Army or be specially enlisted for the purpose; and one contract surgeon. The latter to be contracted with at such time as he may be able to join the party.

4. The commander of the expedition is authorized to hire a steam sealer or whaler, to transport the party from St. John's to Lady Franklin Bay, for a fixed sum per month, under a formal contract that shall release the United States from any and all responsibility, or claim for damages, in case the steamer is injured, lost, or destroyed. The said contract shall include the services and subsistence of the crew of the vessel, and shall require that the said crew shall consist of one captain, two mates, one steward, two engineers, two firemen, and seven seamen—not less than fifteen in all. Such steam sealer or whaler shall not be hired until it has been inspected by an officer, to be detailed by the Secretary of the Navy for that purpose, and found by him fit for the intended service.

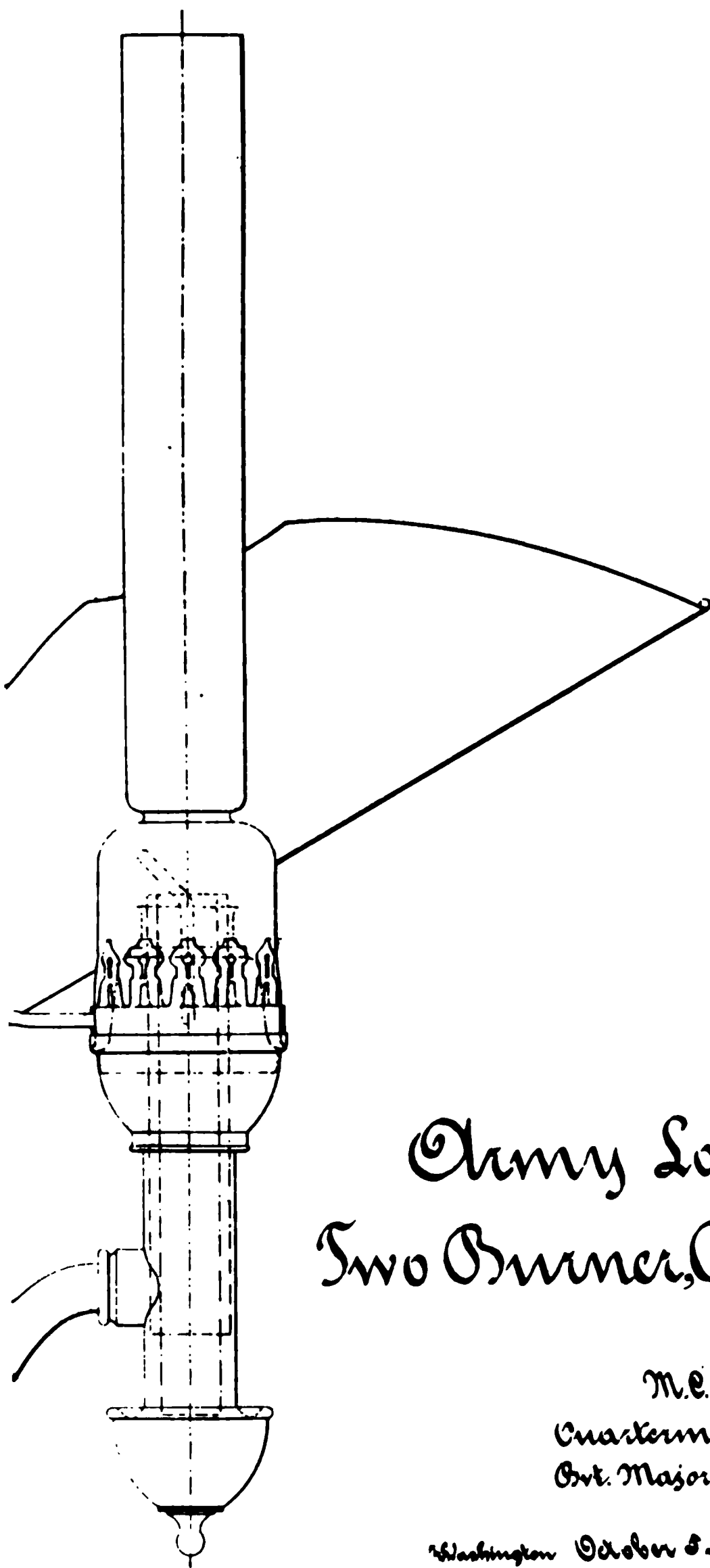
5. The expeditionary force shall be assembled at Washington, District of Columbia, not later than May 15, and at St. John's not later than June 15, 1881.

6. During their absence on this duty Lieutenant Greely and the other officers of the Army accompanying the expedition will retain station at Washington, District of Columbia. The enlisted men who may volunteer or be specially enlisted for this duty shall receive the pay and commutation allowances (except commutation for quarters and fuel) that accrue to men detached for duty in Washington, District of Columbia.

7. The several bureaus of the War Department will furnish, on requisitions approved by the Secretary of War, the necessary subsistence, clothing, camp and garrison equipage, transportation to St. John's, Newfoundland, and return, medicines, books, instruments, hospital stores, arms, and ammunition. The subsistence stores to be furnished as above directed are for sale, not for issue, to the officers and men of the expeditionary force.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.



Army Lamp Two Burner, Pendant.

M. E. Maig.
Quartermaster General
Brig. Major General. U.S.A.

Washington October 5. 1881.

Q.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, January 31, 1880.

SPECIFICATIONS FOR HORSE BLANKETS.

Material to be of all-wool kersey, gray ground and fancy plaid.

Extreme length, seventy-two (72) inches. Depth at hips, thirty-six (36) inches.

Weight to be not less than five (5) pounds.

To have two (2) breast straps of best quality oak-tanned russet leather, properly spaced; to be nine (9) inches long and one (1) inch wide, secured by two (2) tinned rivets one (1) inch apart; the billets and loops to be two and one-half ($2\frac{1}{2}$) inches long, exclusive of buckle, secured in same manner as straps.

Buckles to be one (1) inch, and of the japanned malleable barrel-roller pattern.

To have tail-cord one-quarter ($\frac{1}{4}$) inch diameter, twenty-four (24) inches long.

The blanket to be properly shaped, and to be neatly and substantially faced under straps and billets with an additional thickness of kersey. To be trimmed with scarlet union binding and to have braided cloth pocket for surcingle.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, January 31, 1880.

SPECIFICATIONS FOR SADDLE BLANKETS.

The saddle blanket to be that known as the Spencer's graduated, No. 1.

Size when folded to be as follows: Length of line A B, upon diagram below, to be seventeen (17) inches, and of line C D thirty-five and one-half ($35\frac{1}{2}$) inches.

Thickness (when outspread) at C not less than five-eighths ($\frac{5}{8}$) inch, at E one-half ($\frac{1}{2}$) inch, graduated to a thickness of one-quarter ($\frac{1}{4}$) inch at lower edge.

Weight to be not less than (2) pounds three (3) ounces.

To be shaped as per diagram.

(6882.—Q. M. G. O., 1879.)

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, January 28, 1881.

SPECIFICATIONS FOR PACK-SADDLE BLANKETS.

Each blanket to be seven (7) feet long and five (5) feet six (6) inches wide, and to weigh five (5) pounds; to be grey in color and be made of pure long-staple wool, free from shoddy, reworked wool, cotton, or any impure materials; to have in the center the letters "U. S." four (4) inches long, and under them the letters "Q. M. D." two and a half ($2\frac{1}{2}$) inches long, in scarlet; to bear a strain of not less than twenty-five (25) pounds per inch for the warp and thirty (30) pounds per inch for the woof without tearing, and to have not less than twenty-two (22) threads of warp and twenty-five (25) threads of filling or woof to the inch; the threads to be well driven up; the stripes at the ends of blanket to be four (4) inches wide and be scarlet yarn, dyed with pure cochineal.

NOTE.—It is immaterial whether the letters "U. S. Q. M. D." be stamped on the blanket or woven into the fabric; their color must be of pure cochineal dye.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, January 31, 1880.

SPECIFICATIONS FOR PAULINS.

Best quality No. 4 *standard* cotton duck, 22 inches wide, clear of all imperfections, manufactured from long-staple American cotton; to be free from sizing: the warp to

contain not less than 29 and the filling not less than 24 four-cord threads to the square inch.

Length, 30 feet when finished; 10 widths of material.

Seams to have $1\frac{1}{4}$ -inch lap; ends to have 2-inch fold, neatly made and well secured at corners; all seams to be sewed with double thread of six-fold cotton twine, well waxed, and with not less than $2\frac{1}{2}$ stitches to the inch.

To have ten galvanized-iron grommets, $\frac{1}{2}$ -inch inside diameter, one at each corner, one in center of each end, and two on each side equidistant from corners.

To have triangular stay-pieces at each corner 6 inches deep, and 5-inch triangular stay-pieces under each side and end grommet; all stay-pieces of 12-ounce cotton duck and arranged to come directly opposite each other.

To have a $\frac{3}{8}$ -inch manilla rope, of best quality, 5 feet long, neatly and thoroughly spliced into each grommet, one end to be well whipped with well-waxed thread.

End and corner grommets to be placed in center of lap, side grommets in center of stay-pieces.

Paulins to be stenciled "U. S." in center with $4\frac{1}{2}$ -inch black Doric letters, and with name of manufacturer.

All work to be done in the best workmanlike manner.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, January 31, 1880.

SPECIFICATIONS FOR WAGON PAULINS.

Best quality No. 4 standard cotton duck, clear of all imperfections, 22 inches wide; to be manufactured of long-staple American cotton; to be free from sizing; the warp to contain not less than twenty-nine (29) and the filling not less than twenty-four (24) four-cord threads to the square inch.

Length 16 feet when finished; seven widths of material.

Seams to have $1\frac{1}{4}$ -inch lap; ends to have 2-inch fold, neatly made and well secured at corners; all seams to be sewed with double thread of six-fold cotton twine, well waxed, and with not less than $2\frac{1}{2}$ stitches to the inch.

To have 8 galvanized-iron grommets, $\frac{1}{2}$ -inch inside diameter, one at each corner, and one in center of each side and end.

Triangular stay-pieces at each corner 6 inches deep; 4-inch square stay-pieces under each side and end grommet; arranged to come directly opposite each other; to have one $\frac{3}{8}$ -inch manilla rope, best quality, 5 feet long, neatly and thoroughly spliced into each grommet, one end to be well whipped with well-waxed thread; grommets to be placed in center of stay-pieces.

All work to be done in the best workmanlike manner.

Paulins to be stenciled "U. S." in center with $4\frac{1}{2}$ -inch black Doric letters, and with name of manufacturer.

5.—Report of Maj. J. M. Moore, U. S. A., of barracks and quarters operations, for fiscal year ending June 30, 1881.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 30, 1881.

GENERAL: I have the honor to submit my report covering the principal operations of the barracks and quarters branch of this office for the fiscal year ending June 30, 1881.

NEW CONSTRUCTIONS.

During the year, the construction of 132 new buildings such as barracks, officers' quarters, stables, store-houses, guard-houses, &c., has been authorized at an estimated cost of \$239,445. They are at the military posts in the States of New York, Michigan, Arkansas, Maryland, Virginia, California, Texas, Nebraska, Colorado, Ohio, Florida, and in the

Territories of Arizona, Idaho, Washington, Dakota, Wyoming, Montana, Utah, New Mexico, Indian, and District of Columbia.

REPAIRS.

Subject to the allotments being sufficient and upon special estimates, authority has been given to make repairs, alterations, &c., of public buildings, for the construction and repair of cisterns, &c., and for the purchase of tools, &c., for use at the various military posts and depots, to the amount of \$417,902.

Recapitulation of the expenditures specially authorized for construction of new buildings at established posts, construction and repair of cisterns, miscellaneous repairs, &c., and how distributed.

Department.	Cost of new projects.	Cost of repairs, &c.	Total.
Department of the South	\$1,396 00	\$10,832 00	
Department of the East	48,751 00	96,386 00	
Total Division of the Atlantic	45,147 00	107,218 00	152,365 00
Department of the Missouri	47,780 00	71,184 00	
Department of Dakota	54,821 00	64,299 00	
Department of the Platte	12,776 00	54,877 00	
Department of Texas	8,872 00	7,138 00	
Total Division of the Missouri	124,249 00	197,448 00	321,697 00
Department of Arizona	32,409 00	25,906 00	
Department of the Columbia	21,605 00	52,688 00	
Department of California	16,035 00	34,642 00	
Total Division of the Pacific	70,049 00	113,236 00	183,285 00
Grand total	239,445 00	417,902 00	657,347 00

SCHOOL-HOUSES, &C.

Out of the money referred to, the Secretary of War, under section 1231, Revised Statutes, has authorized during the year buildings to be erected or fitted up for school and religious purposes at the following posts and cost:

Fort Hamilton, New York Harbor	\$1,500 00
Fort Wayne, Mich	250 00
Fort Huachuca, Ariz	1,765 00
Fort Boisé, Ariz	1,355 00
Fort Cœur d'Alene, Idaho	1,500 00
Fort Vancouver, Wash	1,788 00
Fort Walla Walla, Wash	721 00
Fort Halleck, Nev	404 00
Fort Elliot, Tex	1,090 00
Fort Custer, Mont	1,180 00
Fort Sisseton, Dak	375 00
Fort Brown, Tex	1,500 00
Total cost	13,428 00

WHARVES.

Authority has been given for the expenditure of \$6,517 for wharf improvements at the following posts :

Fort Barrancas, Fla	\$2, 117 00
Alcatraz Island, Cal.....	1, 945 00
Angel Island, Cal.....	1, 955 00
West Point, N. Y.....	500 00
Total	6, 517 00

SPECIAL PROJECTS AUTHORIZED BY CONGRESS.

AN ACT making appropriations for the sundry civil expenses of the government for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, and for other purposes. Approved May 4, 1880.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, namely :

For the completion of the necessary buildings for headquarters of the Department of Dakota, at the military post of Fort Snelling, Minnesota, one hundred thousand dollars.

For the construction of a new military post at or near the Musselshell River, in the Territory of Montana, at a site to be approved by the Secretary of War, forty thousand dollars.

For the construction of necessary buildings, including officers' quarters, for the headquarters already commenced of the military Department of Texas on the military reservation at San Antonio, Texas, seventy-five thousand dollars; the total cost thereof shall not exceed one hundred and twenty-five thousand dollars.

For continuing the construction of quarters at Fort Omaha, Nebraska, twenty-five thousand dollars.

For the repair of the government quarters at Fortress Monroe, Virginia, twenty thousand dollars.

For the continuance of Fort Assinaboine, Montana Territory, eighty thousand dollars.

AN ACT to authorize the sale of Fort Logan, Montana Territory, and to establish a new post on the frontier.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be and he is hereby authorized and empowered to establish a new military post at or near Musselshell River in the Territory of Montana, as he may deem best for the protection of the frontier from Indian incursions: *Provided,* That the total cost of the same shall not exceed the sum of fifty thousand dollars.

SEC. 2. The Secretary of War is hereby authorized and directed, after due notice, to sell at public auction or otherwise dispose of in parcels or otherwise, as he may deem most advantageous to the government, the site, reservation and buildings of Fort Logan, Montana Territory, and reinvest the proceeds of such sale in the erection of the post authorized by the first section of this act: *Provided,* That such portion of said buildings, or of the materials thereof, as can be profitably removed to said new post, may be reserved from sale and so removed.

Approved, May 8, 1880.

NOTE.—The sale of Fort Logan, after public notice, realized \$4,525.

By General Order No. 16, of 1880, headquarters Department of Dakota, the new post authorized to be established near the Musselshell River, Montana, is, by authority of Secretary of War, located 12 miles east of Black Butte, and opposite Cone Butte Pass on Ford's Creek, a tributary of the Musselshell River.

The post by same order is designated as Fort Maginnis.

HOSPITALS.

During the fiscal year, construction, repairs, and alterations, &c., of the military hospital buildings throughout the country have been authorized to the amount of \$74,588.

The following table gives the locality of the hospitals and the amount of expenditures authorized at each:

Department.	Post.	Amount.	Total.
South.....	Atlanta, Ga.....	\$940 00	
	Newport Barracks, Ky.....	148 00	
	Fort Macon, N. C.....	52 00	
	Saint Augustine, Fla.....	357 00	
	Fort Barrancas, Fla.....	193 00	
	Jackson Barracks, La.....	342 00	
	Fort Johnston, N. C.....	239 00	
	Little Rock Barracks, Ark.....	727 00	
Total Department of the South.....			\$2,998 00
East.....	David's Island, New York Harbor.....	35 00	
	Fort Hamilton, New York Harbor.....	757 00	
	Washington Barracks, D. C.....	4,240 00	
	Fort Wadsworth, New York Harbor..	368 00	
	Plattsburgh Barracks, N. Y.....	239 00	
	Fort Porter, N. Y.....	387 00	
	Fort Wayne, Mich.....	208 00	
	Fort Trumbull, Conn.....	288 00	
	Fort McHenry, Md.....	823 00	
	Fort Myer, Va.....	298 00	
	Columbus Barracks, Ohio.....	994 00	
	Fort Brady, Mich.....	765 00	
	Fort Monroe, Va.....	156 00	
	Fort Mackinac, Mich.....	248 00	
	Fort Warren, Mass.....	307 00	
	West Point, N. Y.....	100 00	
	Fort Ontario, N. Y.....	33 00	
	Madison Barracks, N. Y.....	174 00	
	Fort Columbus, New York Harbor....	13,000 00	
Total Department of the East.....			25,420 00
Total Division of the Atlantic.....			28,418 00
Arizona.....	Camp Thomas, Ariz.....	522 00	
	Fort Lowell, Ariz.....	288 00	
	Fort McDowell, Ariz.....	126 00	
	Fort Mohave, Ariz.....	429 00	
	Fort Verde, Ariz.....	296 00	
	Fort Bowie, Ariz.....	805 00	
Total Department of Arizona.....			2,464 00
California.....	Fort Alcatraz, Cal.....	214 00	
	Angel Island, Cal.....	411 00	
	Fort Bidwell, Cal.....	172 00	
	Fort Gaston, Cal.....	52 00	
	Fort Halleck, Nev.....	250 00	
	Presidio, Cal.....	187 00	
	Fort Point San José, Cal.....	495 00	
Total Department of California.....			1,781 00
Columbia.....	Fort Boise, Idaho.....	839 00	
	Fort Canby, Wash.....	122 00	
	Fort Colville, Wash.....	6,000 00	
	Fort Klamath, Oreg.....	262 00	
	Fort Spokane, Wash.....	758 00	
	Fort Lapwai, Idaho.....	657 00	
	Fort Stevens, Oreg.....	42 00	
	Fort Townsend, Wash.....	651 00	
	Fort Vancouver, Wash.....	444 00	
	Fort Walla Walla, Wash.....	677 00	
Total Department of the Columbia.....			10,452 00
Total Military Division of the Pacific.....			14,697 00

Department.	Post.	Amount.	Total
Platte	Fort Hall, Idaho .. .	\$300 00	
	Fort Bridger, Wyo.	580 00	
	Fort Douglas, Utah .. .	470 00	
	Fort Laramie, Wyo .. .	753 00	
	Fort Russell, Wyo .. .	1115 00	
	Fort Sanders, Wyo .. .	266 00	
	Fort Niobrara, Nebr .. .	8,060 00	
Total Department of the Platte .. .			\$10,473 00
Dakota .. .	Cantonment Bad Lands, Dak .. .	1,615 00	
	Fort Snelling, Minn .. .	1,290 00	
	Fort Assinaboine, Mont .. .	904 00	
	Fort Buford, Dak .. .	360 00	
	Fort Bennett, Dak .. .	355 00	
	Fort Ellis, Mont .. .	180 00	
	Fort Meade, Dak .. .	615 00	
	Fort Pembina, Dak .. .	430 00	
	Fort Randall, Dak .. .	136 00	
	Fort McKinney, Mont .. .	626 00	
	Fort Keogh, Mont .. .	1,266 00	
	Fort Shaw, Mont .. .	990 00	
	Fort Stevenson, Dak .. .	47 00	
	Fort Hale, Dak .. .	177 00	
	Fort Sisseton, Dak .. .	272 00	
	Fort A. Lincoln, Dak .. .	70 00	
Total Department of Dakota .. .			9,301 00
Missouri .. .	Fort Bayard, N. Mex .. .	518 00	
	Fort Craig, N. Mex .. .	146 00	
	White River Colo .. .	377 00	
	Fort Dodge, Kans .. .	600 00	
	Fort Garland, Colo .. .	150 00	
	Fort Cummings, N. Mex .. .	60 00	
	Fort Leavenworth, Kans .. .	430 00	
	Fort Hays, Kans .. .	314 00	
	Fort Riley, Kans .. .	257 00	
	Fort Wingate, N. Mex .. .	122 00	
	Jefferson Barracks, Mo .. .	1,312 00	
	Fort Stanton, N. Mex .. .	102 00	
	Camp Supply, Idaho .. .	780 00	
	Fort Union, N. Mex .. .	400 00	
	Fort Wallace, Kans .. .	216 00	
	Fort Gibson, Ind. T .. .	220 00	
	Fort Sill, Ind. T .. .	868 00	
	Fort Reno, Ind. T .. .	238 00	
	Fort Elliott, Tex .. .	760 00	
Total Department of Missouri .. .			8,621 00
Texas .. .	San Antonio, Tex .. .	244 00	
	Fort Concho, Tex .. .	623 00	
	San Diego, Tex .. .	58 00	
	Fort Davis, Tex .. .	356 00	
	San Felipe, Tex .. .	111 00	
	Fort McKavett, Tex .. .	196 00	
	Fort Duncanson, Tex .. .	638 00	
	Fort Griffin, Tex .. .	227 00	
	Fort Brown, Tex .. .	156 00	
	Fort Clark, Tex .. .	791 00	
Total Department of Texas .. .			3,485 00
Total Military Division of the Missouri .. .			31,473 00
Grand total .. .			74,506 00

The appropriation for the construction and repair of hospitals for 1880 and 1881 was \$75,000.

PROPERTY TRANSFERRED.

[General Orders, No. 46.]

HEADQUARTERS OF THE ARMY,
 ADJUTANT-GENERAL'S OFFICE,
 Washington, May 12, 1881.

The following orders of the Secretary of War are published for the information of the Army:

I. Under the provisions of section 1666, Revised Statutes, the arsenal at Washington, District of Columbia, is abolished, and the grounds and buildings will be transferred to the Quartermaster's Department for the use of the line of the Army. Such ordnance stores and property as have not yet been removed from the arsenal will be cared for by the commanding officer of the troops, and held subject to the orders of the Chief of Ordnance.

II. The post will hereafter be known and designated as "Washington Barracks," Washington, District of Columbia.

By command of General Sherman:

R. C. DRUM,
Adjutant-General.

SALE OF BUILDINGS, &C.

The sale of 76 old buildings, located in Nebraska, Wyoming, and Montana, together with some temporary shelter in Idaho, and certain old building material in Texas, has been authorized during the year.

MILITARY SITES IN TEXAS.

AN ACT making appropriations for sundry civil expenses of the government for the fiscal year ending June thirtieth, eighteen hundred and seventy-six, and for other purposes. Approved March 3, 1875.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and seventy-six, namely, * * * for the purchase of the following sites for forts in the State of Texas, in accordance with the resolutions and recommendations of the board of officers appointed under act of March third, eighteen hundred and seventy-three, entitled "An act to provide for the purchase, by the Secretary of War, of land for the United States for the sites of forts and military posts:" Fort Brown, twenty-five thousand dollars; Fort Duncan, ten thousand dollars; Ringgold Barracks, ten thousand dollars: *Provided*, That before the payment of the money hereby appropriated good titles shall be made to the United States for such land as contemplated by said act and said report; and no more than the amount appropriated shall be paid for such sites. And the Secretary of War is hereby authorized to accept for the United States, and free of expense to the same, a conveyance of the site of Fort McIntosh.

The title to the site of Fort Brown, after many years of litigation, was finally decided by the district court of Texas as confirmed to the heirs of one Maria Josepha Cavazos.

The heirs having declined to sell for the amount appropriated, suit was instituted by the United States in the district court of Cameron County, under the laws of Texas, for the condemnation, &c., of the land, which has been decided adversely to the United States.

The Attorney-General holding "that the United States is not at all bound by the judgment of the courts of Texas, it not having been a party to the legal proceedings in these courts under any authority of Congress such as would have been essential to authorize any of its officers to submit its rights to such an adjudication," and the General of the Army holding that "Fort Brown is of little importance," the Secretary of War decided that no greater price than that provided by the appropriation (\$25,000) would be paid for the site, and therefore ten-

dered that sum, February 21, 1880, to J. R. Cox, the attorney for the heirs, to which no reply has been received, so far as known to this office.

The site of Ringgold Barracks was also for years in litigation, but the district court of Starr County made decree March 30, 1878, that upon payment into the court of \$20,000, value of land, and \$500 for counsel fees, the United States could acquire a good title.

The act of March 3, 1875, appropriated only \$10,000, but in sundry civil bill of June 16, 1880, Congress further provided, "to complete the purchase of Ringgold Barracks," \$10,538.19, making a total of \$20,538.19.

The Department of Justice having favorably passed upon the title papers, the Secretary of War, July 17, 1880, ordered: "Let the amount called for by the decree of the district court of Starr County, Texas, March term, 1878, be paid"; whereupon the money (\$20,500) was placed to the credit of Maj. B. C. Card, chief quartermaster Department of Texas, who, under date of November 29, 1880, reports having paid it into the court, the receipt of the clerk of the court being filed with his money accounts for that month.

Regarding Fort Duncan, the owner declined to sell for amount appropriated. He subsequently offered to sell for \$20,000, and the Secretary asked Congress for that sum which it failed to grant. Owner in 1877 increased price to \$30,000—subsequently offered to sell for \$25,000—offer good until July 1, 1881. The department is now paying at the rate of \$2,700 per annum.

Regarding Fort McIntosh, the city of Laredo, soon after the passage of the act referred to, executed a deed conveying said site to the United States, but the deed as then prepared carried with it certain obligatory conditions upon the United States, the Department of Justice advised its non-acceptance. The city authorities having subsequently executed a new deed, it was duly submitted to the Attorney-General, based upon whose favorable opinion the Secretary accepted the site March 2, 1880, as authorized by Congress.

The United States title to sites of military posts in Texas having been very unsatisfactory, the honorable Secretary of War, on April 21, 1879, in a communication to the Hon. S. B. Maxey, of the Senate, concurred with the General of the Army in recommending "that Congress appropriate a round sum, say \$200,000, to purchase sites already in existence in Texas, and for such others as may be deemed necessary for the defense of that frontier, at the discretion of the War Department."

In connection with that recommendation, I invite attention to the act of April 16, 1880, appropriating \$200,000 for acquiring sites, &c., in Texas, as published in General Order 27, of 1880, Adjutant-General's Office.

[General Orders No. 27.]

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, April 27, 1880.

The following act of Congress is published for the information and government of all concerned:

AN ACT making appropriations for acquiring sites and the erection of suitable posts for the protection of the Rio Grande frontier.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the sum of two hundred thousand dollars be, and the same is hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of acquiring sites and erecting thereon such military posts on or near

the Rio Grande frontier as may be deemed necessary by the Secretary of War for the adequate protection thereof: *Provided*, That none of said appropriation shall be used for the purposes aforesaid until a valid title to said sites be vested in the United States: *And provided further*, That the State of Texas shall duly release and relinquish to the United States the right to assess or tax said sites, or any of them, or any improvements placed thereon for military purposes, so long as the United States shall remain the owner thereof.

Approved April 16, 1880.

By command of General Sherman :

E. D. TOWNSEND,
Adjutant-General.

On August 24, 1881, Brigadier-General Augur, commanding Department of Texas, reported that "the question of location of suitable posts for the protection of the Rio Grande frontier has been a good deal changed since the passage of this act by the construction of great lines of railroads in Texas, affecting that frontier and its protection very materially, and not until those lines of railroad are definitely located can it be determined where the new posts should be located. The engineer officer of this department is now out with a party examining the country north of the Texas Pacific Railroad towards Fort Elliott and towards El Paso. It is expected that by the time the Lieutenant-General returns, or soon after, the location of the lines of railroad will have been so determined as to enable him to fix upon the sites of the new posts, and when this is done their construction will be at once commenced." To which the Lieutenant-General added: "The whole subject of the location of these posts was arranged by me with General Ord, but the conditions having become altered by the advance of the railroads, I have preferred to hold the matter for the definite location of these lines and the recommendations of General Augur."

POST CEMETERIES.

Authority has been granted and instructions given during the fiscal year for removal of certain bodies from Forts Ripley and Ridgley, Minnesota, to the Rock Island Cemetery, and from Fort Dalles, Oregon, to the Vancouver Cemetery. Also, for putting up a fence and erection of head blocks at Monterey Cemetery, California, and for general repair of fences, &c., at Fort Boise, Idaho, and Fort Mackinac, Michigan.

LOSSES BY FIRE.

Fourteen fires have been reported this year.

Post.	Property destroyed.
Prescott, Ariz.....	Headquarter-office building.
Fort Randall, Dak.....	Kitchen and dining-room.
Fort Apache, Ariz.....	Bakery.
West Point, N. Y.....	Officers' quarters.
Fort Supply, Idaho.....	Officers' quarters.
Fort Adams, R. I.....	Officers' quarters.
Fort Verde, Ariz.....	Officers' quarters.
Ogden, Utah.....	Warehouse and office.
Fort Keogh, Mont.....	Barracks.
Fort Washakie, Wash.....	Saw-mill, &c.
Jefferson Barracks, Mo.....	Lime-house.
Fort Russell, Wash.....	Stable.
Fort Lincoln, Dak.....	Officers' quarters.
Fort Snelling, Minn.....	Wood-shed, &c.

RESERVATIONS DECLARED BY THE PRESIDENT.

Post reserves.

Hot Springs, Ark., November 17, 1880.

Fort Maginnis, Mont., April 8, 1881.

White River, Col., April 26, 1881.

Fort Assinaboine, Mont., June 16, 1881, in lieu of that of March 4, 1880.

Fort Totten, Dak.; boundaries extended August 20, 1881.

Fort Cummings, N. Mex.; boundaries extended November 9, 1880.

WOOD AND TIMBER RESERVATIONS.

Fort Niobrara, Nebr., June 6, 1881.

Fort Laramie, Wyo., February 9, 1881.

Fort Fred Steele, Wyo., November 4, 1880.

Fort Meade, Dak., April 18, 1881.

Very respectfully, your obedient servant,

JAS. M. MOORE,
Quartermaster, U. S. A.

TO QUARTERMASTER-GENERAL, U. S. A.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 30, 1881.

TO THE QUARTERMASTER-GENERAL, U. S. A.

Washington, D. C.:

GENERAL: Congress, in sundry civil bill approved June 20, 1878, appropriated \$25,000 for new barracks at Fortress Monroe, Va., and in similar bill, of March 3, 1879, a further sum of \$34,000 was granted to complete the work.

A plan of the building as erected is herewith, together with reports of local officers regarding its merits.

In sundry civil bill of March 3, 1881, Congress appropriated \$30,000 for new barracks, &c., at Fort Leavenworth, Kans. A tracing of the barracks, as adopted by the new Secretary of War, is herewith.

As the lowest bid exceeded the appropriation, the erection of only one wing has thus far been authorized.

Very respectfully, your obedient servant,

JAS. M. MOORE,
Quartermaster, U. S. A.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., June 3, 1881.

COL. GEORGE W. GETTY,

Commanding, Fortress Monroe, Va.:

DEAR GENERAL: The new barracks at Fortress Monroe have now been occupied long enough to have developed whatever merits or defects exist—plan, arrangements, or construction, as a guide in future building.

I request you to advise me on their common healthfulness, and on any other points of importance or of interest.

I wish to send your observations to a board, now engaged on barrack plans at Fort Leavenworth.

I am, respectfully, your obedient servant and friend,

M. C. MEIGS,
Quartermaster-General, Bvt. Major-General, U. S. A.

HEADQUARTERS, FORT MONROE, VA.,
June 17, 1881.

The QUARTERMASTER-GENERAL, U. S. A.,
Washington, D. C.:

SIR: Referring to your letter of the 3d of June last, making inquiries as to the suitability, &c., of the new barracks at this post, I have the honor to inform you that as a whole the building supplies the service of the lodgment of troops better than any military building of its kind which has ever come under my observation.

Regarding construction, the only fault thus far noticed is the cracking of the plastering in the wooden partition walls, due, presumably, to the buckling of some of the timbers. These walls would be better constructed of masonry (as are the partition walls between the sets of company quarters), and would have been so constructed in this case had there been sufficient money. This defect, however, is not vital.

One of the chief merits of the barrack, aside from the general arrangement of rooms, &c., is, in my opinion, its perfect ventilation, which is strongly apparent by the entire absence of the usual foul odors of enlisted men's quarters. The healthfulness of such a barrack is beyond question, while their comfort is attested by the evident contentment of the men, which has been added to by the recent issue of proper lights.

I inclose, herewith, reports from several of my officers upon this subject, and remain,

Very respectfully, yours,

GEO. W. GETTY,
*Colonel Third Artillery,
Brevet Maj. Genl., U. S. A., Commanding.*

BATTERY G, FIRST ARTILLERY,
Fort Monroe, Va., June 16, 1881.

Lieut. C. CHASE, *Adjutant*:

SIR: In relation to the new barracks, I have to say that my battery G, First Artillery, has been quartered in them ever since their completion. The rooms on the first floor I find wonderfully well adapted to their various uses as kitchen, mess-room, bath-room, store-room, office, &c. The second floor or squad rooms are the best I have ever known in the service. The ventilation is *perfect*, and there is no difficulty in keeping them at all times sweet and clean. The supply of water is abundant and of excellent quality. In short I can suggest no improvement, except that flooring the attic, or space over the squad-rooms, a convenient space would be afforded for the storage of the more bulky articles of battery property.

I am clearly of the opinion that there has been a marked improvement in both the health and conduct of the men since their occupancy of their new and comfortable quarters.

I am, very respectfully, your ob't servant,

SAM'L S. ELDER,
Captain First Artillery, Commanding Battery G.

FORT MONROE, VA., June 10, 1881.

POST ADJUTANT,
Fort Monroe, Va.:

SIR:

* * * * *

The barracks taken all together, the kitchen, dining-room, bath-room, and dormitory, are as near perfection of quarters as the soldier would desire.

I have the honor to be, very respectfully, your obedient servant,

CHARLES PAGE,
Surgeon, U. S. A., Post Surgeon.

past fiscal year, and the number of claims remaining in their hands for investigation at the close of the year, are as follows:

Names of officers making reports.	Number of claims.	Total amount of claims.	Amounts recommended for allowance by agents.	Number of claims in hands of officers for investigation.
Col. C. H. Tompkins, Assistant Quartermaster-General, chief quartermaster Military Division Missouri, Chicago, Ill.....	375	\$200,612 44	\$4,163 48	213
Lient. Col. James A. Ekin, depot quartermaster, Jeffersonville, Ind.....	966	452,951 03	79,855 66	1,399
Maj. J. J. Dana, quartermaster, Nashville, Tenn.....	2,120	1,353,714 74	145,698 56	4,334
Maj. B. C. Card, depot quartermaster, Washington, D. C.....	352	271,451 01	34,493 89	1,124
Total.....	3,813	2,287,729 22	264,211 59	7,297

The following statement shows the number and amount of claims on hand July 1, 1880, the number and amount of those received, and the number and amount of those on which decisive action was taken during the fiscal year ending June 30, 1881, and of those remaining on hand:

Statement of claims under section 300A of the Revised Statutes (act of July 4, 1864), in the Quartermaster-General's Office, for the fiscal year ending June 30, 1881.

	Number.	Amount.	Number.	Amount.
On hand July 1, 1880, which had previously been suspended or had received no decisive action.....	22,891	\$11,997,460 21		
Military board claims called up during the year.....	44	37,290 08		
Total on hand for consideration.....			22,935	\$12,034,750 29
Decisive action taken during the year:				
Approved.....	1,149	227,680 39		
Reduction on claims approved.....		344,898 93		
Rejected.....	1,995	1,885,173 82		
Total on which final action has been taken.....			3,144	2,457,753 14
Remaining on hand July 1, 1881.....			*18,791	10,576,997 15

The actual number on hand exceeds the number stated here. By a decision of the Quartermaster-General of 1876, "no claim is rejected till he sees and acts on it," whereas in previous years the officers on duty in this office had signed letters "rejecting" claims, and such cases were reported in the yearly statements as having been rejected. By the decision of the Quartermaster-General they are yet open for consideration, and from time to time are being further considered.

Of those remaining on hand at the close of the fiscal year, 2,018 had been investigated, briefed, and were about ready for final action, which was not had because of the press of other duties upon the Quartermaster-General's Office. This number, added to the 3,144 on which decisive action was taken during the fiscal year, shows a total number of 5,162 claims which received, or were in a condition to receive, final action during the year.

A large number of the cases on hand had been investigated and passed different stages of examination during the year, but had not reached a condition for final action by the Quartermaster-General.

The work on these claims during the fiscal year has made very satisfactory progress. It will be observed that the number of cases finally disposed of (3,144) is greater than for any fiscal year since 1866-'67.

The work on the field investigations was to some extent interrupted for several months preceding the close of the fiscal year by discharge or suspension of some of the agents and clerks employed thereon, and the salaries of others were greatly reduced, all by reason of the low state of the appropriations for support of the Army, from which alone the salaries and other expenses of such agents and clerks are paid.

The following statement shows the number and amount of the claims received, considered, &c., under the law of section 300 A, Revised Statutes (act of July 4, 1864), during each year since the passage of the act:

Claims filed in the Office of the Quartermaster-General, under the act of July 4, 1864, chapter 244.

Fiscal year in which filed.	Total received.		Approved.		Disallowed in claims on which allowances were made.	Rejected.	
	Number.	Amount.	Number.	Amount.	Amount.	Number.	Amount.
1864-'65	2,890	\$1,687,858 25	783	\$273,860 80	\$56,736 17	1,404	\$1,023,420 87
1865-'66	13,219	7,731,253 83	2,230	877,151 76	280,008 30	7,419	4,792,306 79
1866-'67	7,068	3,707,903 24	1,197	479,640 84	263,470 61	3,102	1,634,068 81
1867-'68	2,778	1,602,870 74	401	248,124 71	157,449 77	603	387,704 80
1868-'69	847	670,542 82	173	106,406 78	47,645 51	222	142,006 45
1869-'70	637	610,707 22	119	66,681 45	24,596 98	113	196,598 18
1870-'71	590	1,800,004 58	47	26,216 71	47,765 42	60	132,148 17
1871-'72	1,124	1,483,314 18	665	367,102 72	410,234 95	274	396,100 75
1872-'73	1,963	2,024,725 16	642	296,775 90	318,436 52	325	443,689 75
1873-'74	2,606	3,144,572 34	881	495,234 38	537,250 47	528	694,152 19
1874-'75	2,044	2,345,315 22	403	188,581 63	352,882 33	871	1,314,460 29
1875-'76	1,098	1,204,834 38	302	186,229 50	237,210 51	1,254	1,995,767 89
1876-'77	836	679,202 04	460	155,272 52	295,796 44	642	1,352,159 88
1877-'78	1,408	902,490 99	967	255,084 99	337,791 09	1,345	1,741,197 86
1878-'79	1,640	961,420 00	635	121,568 26	199,517 37	1,032	1,077,212 92
1879-'80	12,757	7,527,051 56	594	157,650 70	156,814 19	921	738,420 46
1880-'81	44	37,290 08	1,149	\$227,680 39	344,898 93	1,995	1,885,173 82
Total	53,549	38,121,356 63	11,648	4,529,264 04	4,068,505 56	22,110	19,946,589 88

RECAPITULATION.

Number approved..... 11,648
 Number rejected..... 22,110

Total..... 33,758

Amount approved..... \$4,529,264 04
 Amount of reduction..... 4,068,505 56
 Amount rejected..... 19,946,589 88

Total..... 28,544,359 48

Total number of claims received..... 53,505

In addition to the above are a considerable number of claims filed before military boards, which have been transmitted to this office with reports of these boards but are not placed on its lists as filed here until called up for action by claimant. Of such there were called up during the past year..... 44

Making total number filed to 30th June, 1881..... 53,549

Total number of claims approved, reduced, and rejected..... 33,758

Balance on hand..... 19,791

Total amount..... \$38,121,356 63

Total amount approved, reduced, and rejected..... 28,544,359 48

Balance..... \$9,576,997 15

MISCELLANEOUS CLAIMS.

Other claims of a miscellaneous character, based on certified vouchers, &c., to the number of 47, amounting to \$9,196.57, were received during the fiscal year and 155 claims of the same class, amounting to \$25,087.72, were reported to the Treasury for the action of the accounting officers.

I am, very respectfully, your obedient servant,

JAS. M. MOORE.

Quartermaster, U. S. A.

The QUARTERMASTER-GENERAL, U. S. A.

No. 7.—*Report of Maj. B. C. Card, quartermaster, United States Army, of the affairs relating to the care and maintenance of national military cemeteries, for the fiscal year ending June 30, 1881.*

OFFICE OF NATIONAL CEMETERIES,
Washington, D. C., August 17, 1881.

To the QUARTERMASTER-GENERAL:

GENERAL: I have the honor to submit the usual annual report concerning the national military cemeteries for the fiscal year ending on the 30th day of June, 1881.

The appropriation granted for their care and maintenance during the year was \$100,000, and the expenditures amounted to \$96,439.36, as follows:

Repair of walls and gates.....	\$3,162 30
Building and repairing lodges.....	15,127 20
Rent of quarters.....	425 00
Construction and repair of out-houses.....	7,575 15
Purchase of trees and plants.....	3,007 44
Employés.....	39,929 86
Draining and improving grounds.....	16,555 47
Miscellaneous stores and repairs.....	3,780 42
Flagstaffs and monuments.....	698 00
Water supply.....	5,781 96
Advertising and printing and recording deeds.....	222 21
Interments.....	173 75
Total.....	96,439 36

A detailed statement of these expenditures will be found in the appendix to this report. With these means the cemeteries have been kept in excellent order.

New lodges have been built at the Mobile, Chalmette, and Beaufort national cemeteries. The Chalmette lodge was constructed after design prepared especially for that cemetery, and is well suited to that climate.

Substantial out-buildings, of brick or stone, have been erected at the Chalmette, Fayetteville, Fort Smith, Mobile, New Albany, and New Berne national cemeteries. As the old out-houses at the various cemeteries become dilapidated and unfit for further repairs, it is the intention to replace them with brick or stone structures.

A rostrum has been built at the national cemetery at New Albany, Ind., for Decoration Day services.

The grounds at the larger cemeteries have been extensively improved by grading, top-dressing, &c., and the result is very gratifying. The Chattanooga and Nashville cemeteries may be specially mentioned in this connection; both now present a very beautiful appearance. There is

yet, of course, at all these places, room for still further improvement, and the work will be steadily prosecuted as the means will allow. A liberal supply of good fertilizers will be distributed in the fall to many of the cemeteries, to improve the sod, on which the good appearance of the cemeteries so largely depends.

Provision has also been made for an additional supply of trees and plants for such cemeteries as are not sufficiently provided with them. They will be carefully selected at good nurseries, and every effort made to plant them successfully.

The Marietta cemetery contains about 24 acres and is much visited. It is proposed to construct there at an early day a handsome archway and a rostrum or speaker's stand.

The road to the Vicksburg national cemetery was completed during the year, so far as the means permitted, and opened to travel in the spring. An additional appropriation has been granted, with which the road will be graveled in the fall.

The road to the Fort Scott, Kansas, national cemetery is now being built. The grading is nearly completed, and a contract has been let on favorable terms for macadamizing it. The appropriation, it is feared, however, will not suffice for completing the work, and an additional sum of \$7,000 has been asked for.

Congress at its last session appropriated \$5,000 for constructing a road from the city of Chattanooga to the national cemetery near that place, and measures have been taken to secure the necessary right of way. The estimate of the engineer for this work was \$15,000, for a macadamized road, and it is hoped that a sufficient additional appropriation may be granted to build such a road.

The roads at these places, namely, Vicksburg, Fort Scott, and Chattanooga, when completed, will afford easy access to the cemeteries, which are much visited. The number of visitors, however, is much less than at the national cemetery at Arlington, near this city, which can be reached only by a very bad, and, in winter, a dangerous road. Light vehicles have not infrequently been mired immediately in front of the cemetery, and, altogether, this journey to a place that cannot fail to be of so much interest to the visitors to the National Capital is made only under serious discomfort. In view of the fact that Congress has granted the means to make decent approaches to other national cemeteries of less prominence, I beg to renew the recommendation so often made by my predecessor, Colonel Rockwell, that the same aid be given towards constructing a passable road to the Arlington cemetery.

The national cemeteries near the cities of Brooklyn and Baltimore—Cypress Hills and Loudon Park—are nearly filled with graves, and in Philadelphia streets are likely to be opened through some of the incorporated cemeteries in which there are soldiers' lots owned and maintained by the United States, which will necessitate the removal of the remains.

With regard to Cypress Hills, there is yet room for about 400 bodies, and at the rate of burials during the past few years, this space may suffice for the next twenty years. But this is simply conjecture. The number of interments may increase, and, in any event, the fact that the Cypress Hills national cemetery is the only national cemetery near the large cities of New York and Brooklyn, and that the government lot is nearly full, renders it advisable to secure more ground in that vicinity at a not distant day. Additional lots adjoining the present national cemetery can be purchased for about \$22,000. This is a large sum, but when the land is once paid for and improved, the cost of maintenance

would be only a trifle more than for the present cemetery. Instructions have, however, been given to ascertain whether a few acres of rural land, within easy distance of New York, can be purchased for a reasonable sum, for a new cemetery.

In the Loudon Park cemetery, near Baltimore, the government lot contains only a little over an acre, and affords no room for the large number of visitors on Decoration Day, estimated this year at 10,000. Steps have therefore been taken to enlarge the cemetery by the purchase of an additional piece of ground, immediately adjoining the land now owned by the United States.

In Philadelphia the United States owns lots in seven cemeteries. The city, it is understood, intends to open up streets through some of these cemeteries, and, in that case, the government will be compelled to provide other ground for the reinterment of the soldiers' remains. After a careful consideration of the case, it appears to be best to purchase a few acres of land in the immediate vicinity of Philadelphia, and there establish a national cemetery, to which can be removed all the bodies from the government lots now scattered through the city. The quartermaster at Philadelphia has been instructed to look into the matter and ascertain whether a suitable piece of land can be purchased, and for what sum. As soon as his reply is received, a special report will be made on the subject for transmission to Congress, as it is probable that a special appropriation will be necessary to carry out the action proposed.

The number of interments in the national cemeteries on the 30th of June last was 318,859; of these, 219 were made during the fiscal year.

In nearly all of the national cemeteries are interred civilians, prisoners of war, freedmen, and women and children, buried during or immediately after the war, whose graves are still marked with the old headboards, which are rapidly decaying, and are therefore very unsightly. These boards will, from time to time, as means will allow, be replaced by white marble slabs, 2 inches thick, which we are now able to procure at very reasonable rates—\$1.50 each—during the progress of the other headstone work.

The work of erecting the headstones at soldiers' graves in private and village cemeteries has not progressed satisfactorily, and it seems probable that one of the contractors will fail to carry out his agreement, in which event the sureties on his bond, who own the quarries from which the marble is procured, will, it is understood, undertake to complete the work. Headstones have been shipped to the New England States, New York, Delaware, and the District of Columbia, but many have yet to be delivered at the cemeteries and properly erected.

There were seventy-one superintendents in service July 1, 1880. During the fiscal year six were appointed, two died, two resigned, one was discharged, and two were dismissed, leaving seventy in service June 30, 1881.

I am, general, very respectfully, your obedient servant,
BENJAMIN C. CARD,
Quartermaster, U. S. A., in charge of National Cemeteries.

Name of cemetery.	Walls.		Lodges.		Rent of quarters.	Outhouses (sheds, stables, &c.).	(Greenhouses.	Trees, plants, &c	Employees.	Drainage.
	Repair.	Gates.	Construction.	Repair.						
Annapolis, Md									\$109 50	
Alexandria, La								\$60 00	227 50	
Alexandria, Va								44 25	349 00	
Andersonville, Ga								9 00	544 83	
Arlington, Va	\$327 85	\$36 44				\$182 31	\$130 30	28 50	5 391 54	
Antietam, Md						95 00		91 16	429 50	
Bull s Bluff, Va								96 70	25 00	
Barrancas, Fla	5 00							160 00	175 00	
Baton Rouge, La		3 00				28 05		21 00	529 17	
Battle Ground, D C						63 48				
Beaufort, S C	40 00		\$1,200 00			6 00				
Beaverly, N J	50 00								635 62	
Brownsville, Tex										
Camp Butler Ill								20 00	800 00	
Camp Nelson, Ky	37 31							10 60	163 50	\$52 45
Cave Hill, Ky									419 99	15 00
Chalmette La			5,927 00			41 00		10 10	31 87	15 50
Chattanooga, Tenn						750 00		35 00	947 15	
City Point, Va								108 00	2,227 50	
Cold Harbor, Va								75 00	180 00	
Corinth, Miss								30 00	6 00	
Crown Hill Ind								34 80	767 00	
Culpeper, Va								24 00		
Cypress Hills, N Y						25 00			177 00	
Danville, Va						15 00		15 00	150 00	
Danville, Ky								35 05	30 00	16 50
Fayetteville, Ark									100 00	
Fredericksburg, Va		5 00				521 00		29 35	151 67	
Ft m Point, N J						25 00		100 00	411 50	
Florence, S C								10 00	5 00	
Fort Donelson Tenn									105 75	
Fort Gibson Ind Ter									76 00	
Fort Harrison Va	15 00					50 00		32 50	268 15	
Fort Leavenworth Kans	\$11 91							50 00	288 53	39 80
Fort McPherson, Nebr									254 50	
Fort Scott, Kans								90 50	148 00	
Fort Smith, Ark						600 80		34 50	270 80	

A.—Statement of disbursements of appropriations for national cemeteries during the fiscal year ending June 30, 1881—Continued.

Name of cemetery.	Walls.		Lodges.		Rent of quarters.	Outhouses (sheds, stables, &c.).	Greenhouses.	Trees, plants, &c.	Employees.	Drainage.
	Repair.	Gates.	Construction.	Repair.						
Grafton, W. Va.				\$9 75				\$10 00	\$150 00	
Glendale, Va.				10 00		\$10 00		25 00		
Gettysburg, Pa.						339 29		242 25	422 00	\$163 63
Hampton, Va.								74 45	549 33	
Jefferson Barracks, Mo.				6 50				136 26	1,545 50	137 30
Jefferson City, Mo.	\$175 00			40 50		22 00		25 35	126 67	
Keokuk, Iowa				1 25		16 00				
Knoxville, Tenn.	290 00								184 00	
Laurel, Md.									30 00	
Lebanon, Ky.		\$68 50		26 40					201 08	
Little Rock, Ark.				25 00				68 25	645 67	
Logan's Cross Roads, Ky.		56 00			\$165 00	50 00			63 00	27 00
London Park, Md.										
Marietta, Ga.	390 00			38 00				10 00	852 50	
Memphis, Tenn.				34 05				1,545 75	1,517 33	
Mobile, Ala.	168 50		\$2,936 00		68 00	565 63			36 00	
Mound City, Ill.				50 00				3 20	271 87	
Nashville, Tenn.		350 00		34 97				180 75	1,822 83	
Natchez, Miss.						800 00		43 75	546 00	
New Albany, Ind.				34 64		1,891 05	\$32 24	2 00	283 12	8 75
New Berne, N. C.				78 00		1,120 00		95 63	238 50	
Philadelphia, Pa.					192 00			126 82	342 00	
Pittsburg Landing, Tenn.								72 50	328 00	
Poplar Grove, Va.				5 00		5 00		45 00	160 00	
Port Hudson, La.		5 00						28 50	265 00	
Raleigh, N. C.				292 85		33 25			180 00	
Richmond, Va.				10 75		10 00		125 00	320 00	
Salisbury, N. C.				1 50				64 15	192 25	
San Antonio, Tex.								10 00	25 00	
Staunton, Va.	100 00								31 50	
Seven Pines, Va.				10 00				30 00		
Springfield, Mo.		18 50		21 85					164 00	
Soldiers' Home, D. C.				131 00		127 36			522 00	6 00
Stone's River, Tenn.				111 94				81 75	482 00	
Vicksburg, Miss.	209 49			25 00		83 07		8 25	2,303 64	
Wilmington, N. C.				32 00				74 82	70 00	
Winchester, Va.				40 26				10 00	159 50	

City of Mexico.....	10 00	.....	5 00	74 25	.....
Miscellaneous.....	.....	.....	.....	1,000 00	.....
Brattleboro, Vt.....	.....	.....	.....	7,588 75	.....
Lexington, Ky.....	.....	.....	.....	75 00	.....
Woodlawn (Elmira), N. Y.....	.....	.....	.....	60 00	.....
Baxter Springs, Kans.....	.....	.....	.....	100 00	.....
Ashland (Carlisle), Pa.....	.....	.....	.....	25 00	.....
	.....	.....	.....	50 00	.....
Total disbursements during the year	2,619 88	542 44	12,063 00	3,064 20	425 00
			7,412 51	162 64	3,007 44
					39,929 86
					476 93

A.—Statement of disbursements of appropriations for national cemeteries during the fiscal year ending June 30, 1881—Continued.

Name of cemetery.	Barack and office furniture.	Purchase of tools and stores, and miscellaneous expenditures.	Improvement of grounds.	Flags and monuments.	Water supply.	Purchase of land, ex- amining titles, &c.	Interments.	Advertising and printing.	Total.
Annapolis, Md.		\$25 00	\$60 00			\$15 00			\$259 50
Alexandria, La.		42 75							314 50
Alexandria, Va.	\$2 60	40 40	203 60			50 00			714 35
Andersonville, Ga.		47 85	195 88						817 06
Arlington, Va.		616 61	3, 196 74	\$25 00		3, 966 52			14, 837 57
Antietam, Md.	4 50	123 42	222 92	77 00					1, 013 12
Ball's Bluff, Va.									25 00
Barrancas, Fla.		15 00	300 00						690 00
Baton Rouge, La.		36 23		3 40					621 85
Battle Ground, D. C.		12 75	94 25	7 00					302 48
Beaufort, S. C.	6 00	37 69	170 00	34 00		248 65			4, 437 96
Beverly, N. J.		16 40							66 40
Brownsville, Tex.		39 95							599 95
Camp Butler, Ill.		17 85							253 90
Camp Nelson, Ky.		26 91	385 11	5 00					941 84
Cave Hill, Ky.		43	22 81			329 70	\$3 00		130 71
Chalmette, La.		99 63	212 60						8, 364 08
Chattanooga, Tenn.		43 55	2, 300 00						4, 729 05
City Point, Va.		14 73	261 05			8 00	2 25		541 03
Cold Harbor, Va.		92 55	29 00	10 00		53 00			290 64
Corinth, Miss.		32 56	56 10	3 25		20 00	5 00		927 42
Crown Hill, Ind.				3 00					27 00
Culpeper, Va.		39 40	85 00			5 50			331 90
Cypress Hills, N. Y.		31 00	60 00	10 00			60 00		341 00
Danville, Va.		23 30	58 37						184 40
Danville, Ky.		3 00							103 00
Fayetteville, Ark.		28 41	369 54						1, 245 38
Fredericksburg, Va.		78 52	171 49	1 25		16 00			797 76
Flinn's Point, N. J.		13 73	30 00						95 73
Florence, S. C.		14 75							120 50
Fort Donelson, Tenn.		28 00	12 80						136 00
Fort Gibson, Ind. Ter.		44 57	629 35						1, 004 57
Fort Harrison, Va.		26 51	64 62			7 00			274 04
Fort Leavenworth, Kans.		4 10	1 49			46 75	64 00		1, 294 04
Fort McPherson, Neb.		14 00	9 00						281 50
Fort Scott, Kans.		36 00	209 97						574 47
Fort Smith, Ark.		42 68	45 00						903 18

Total disbursements during the year		51 35	3, 729 07	16, 078 54	698 00	5, 781 96	5 25	173 75	217 56	96, 439 36
Grafton, W. Va				25 00	5 25					224 85
Glendale, Va				33 00						96 52
Gettysburg, Pa.				144 50						1, 352 56
Hampton, Va.				49 50		52 40				793 60
Jefferson Barracks, Mo.					93 00	56 00				2, 031 41
Jefferson City, Mo				10 10						442 00
Keokuk, Iowa										46 25
Knoxville, Tenn.										506 85
Laurel, Md.										30 00
Lebanon, Ky				106 68						415 24
Little Rock, Ark				371 50						1, 143 52
Logan's Cross Roads, Ky				88 00						292 19
Loudon Park, Md				100 12						315 12
Marietta, Ga	15 00			500 00		8 50				1, 872 77
Memphis, Tenn				58 70		138 85				1, 951 78
Mobile, Ala				286 65			3 00			4, 071 55
Mound City, Ill				26 00		5 00				378 82
Nashville, Tenn.				2, 486 50		15 00				4, 947 10
Natchez, Miss.				250 00						1, 648 19
New Albany, Ind				172 25						2, 435 41
New Berne, N. C.				142 50						1, 719 30
Philadelphia, Pa.				11 75						706 44
Pittsburg Landing, Tenn.				110 25						552 82
Poplar Grove, Va				107 00		17 50		14 50		375 56
Port Hudson, La										313 18
Raleigh, N. C.				50 00						566 19
Richmond, Va.				147 00		52 00		5 00		709 93
Salisbury, N. C.				74 86						350 59
San Antonio, Tex						25 00				60 00
Staunton, Va				10 00						156 25
Seven Pines, Va				84 75						197 40
Springfield, Mo	1 75			3 00	28 50	48 25				316 85
Soldiers' Home, D. C.				331 60		49 35				1, 154 98
Stone's River, Tenn				188 25						1, 091 33
Vicksburg, Miss.				462 39		721 25	2 25			3, 898 56
Wilmington, N. C.				20 00						215 19
Winchester, Va				25 00				20 00		281 15
Yorktown, Va	21 50			50 00						163 42
City of Mexico										1, 200 00
Miscellaneous									217 56	8, 425 23
Brattleboro', Vt										75 00
Lexington, Ky	1 10									61 10
Woodlawn (Elmira), N. Y										100 00
Baxter Springs, Kans										25 00
Ashland (Carlisle), Pa										50 00
Total disbursements during the year										96, 439 36

I certify that the above statement is correct.

BENJ. C. CARD,
Quartermaster, United States Army.

REPORT OF THE COMMISSARY-GENERAL OF SUBSISTENCE.

REPORT
OF THE
COMMISSARY-GENERAL OF SUBSISTENCE.

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, D. C., October 10, 1881.

SIR: I have the honor to submit the following report of the operations of the Subsistence Department for the fiscal year ending June 30, 1881, with such remarks and recommendations in connection therewith as are thought to be for the best interest of the government and the Army.

RESOURCES AND EXPENDITURES.

The following statement exhibits the aggregate fiscal resources and expenditures of the department for the year mentioned, and the balances remaining unexpended at the close of the fiscal year:

RESOURCES.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1880, as follows:

Subsistence of the Army, 1877 and prior years, act June 16, 1880	\$3,368 95	
Subsistence of the Army, 1879	28,331 99	
Subsistence of the Army, 1880	1,081 85	
Commutation of rations to prisoners of war in rebel States, per act June 16, 1880	8,221 38	
		\$41,004 17

Amount to the credit of officers of the Subsistence Department and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositories, and in their personal possession, on June 30, 1880, as follows:

Subsistence of the Army, 1880	391,043 19
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Amounts deposited to the credit of the Treasurer of the United States and in process of cover into the appropriations on June 30, 1880, since covered in, as follows:

Subsistence of the Army, 1878 and prior years	9 71	
Subsistence of the Army, 1879	160 30	
Subsistence of the Army, 1880	90 91	
		260 92

Amount in hands of representatives of deceased officer to be collected:

Subsistence of the Army, 1878	109 84
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Amounts appropriated for the Subsistence Department for the fiscal year ending June 30, 1881, as follows:

Subsistence of the Army, 1878, and prior years, act March 3, 1881	2,212 44
Subsistence of the Army, 1881, act May 4, 1880	2,250,000 00

Commutation of rations to prisoners of war in rebel States, per act March 3, 1881	\$10,305 87	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act June 15, 1880	15,062 29	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act March 1, 1881	3,268 51	
		\$2,280,849 11
Amounts collected from various sources and refunded to the appropriations of the Subsistence Department on the books of the Treasury during the fiscal year 1881, as follows:		
Subsistence of the Army, 1878 and prior year	349 89	
Subsistence of the Army, 1879	473 36	
Subsistence of the Army, 1880	41,257 13	
Subsistence of the Army, 1881	104,258 70	
		146,339 08
Amounts received by officers of the Subsistence Department and by officers doing duty in the Subsistence Department, from sales of subsistence stores to the following purchasers during the fiscal year 1881, and taken up for immediate disbursement under the appropriation, Subsistence of the Army, 1881:		
Sales to officers of the army, \$461,912.58; to enlisted men, \$239,884.33; to companies, detachments, and hospitals, \$144,424.54; to civil employes, \$15,297.06; to Fort Leavenworth Military Prison, \$17,334.72; to civil engineers, \$2,847.66; to railroad engineers, \$780.98; to civil employes of Agricultural Department, \$384.77; to Mullan road employes, \$284.53; to steamers, \$156.14; to Indians, \$153.02; Indian Commissioners, \$122.06; to Quartermaster's Department, \$103.80; to railroad employes, \$73.17; of condemned stores at auction, \$6,697.23; of boxes, barrels, &c., \$746.30; of garden seeds and agricultural implements, \$1,325.41; total		892,528 30
Amounts received from sales of public property to be deposited as "miscellaneous receipts"		54 10
Amounts taken up by officers doing duty in the Subsistence Department, on account of stores lost, damaged, &c., and in correction of errors in their accounts, &c., during the fiscal year 1881:		
Subsistence of the Army, 1881		2,115 44
Amounts arising from various sources and deposited to the credit of the Treasurer United States during the fiscal year 1881, under the following appropriations, viz:		
Subsistence of the Army, 1879	2 25	
Subsistence of the Army, 1880	60 00	
Subsistence of the Army, 1881	37 50	
		99 75
Amounts charged against officers (deceased and resigned) on account of funds alleged to have been lost by theft, &c., as follows:		
Subsistence of the Army, 1879 and prior years		3,000 89
Amounts charged against officers, still in service, on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims under sections 1059 and 1062, Revised Statutes, (including all sums of this character heretofore entered in this statement), as follows:		
Subsistence of the Army, 1879 and prior years		2,772 86
Total resources		\$3,760,177 65

EXPENDITURES.

Amounts expended on the books of the Treasury from the appropriations of the Subsistence Department during the fiscal year 1881, as follows:	
Subsistence of the Army, 1877 and prior years, act June 16, 1880	\$3,368 95
Subsistence of the Army, 1878 and prior years, deficiency act March 3, 1881	2,212 44
Commutation of rations to prisoners of war in rebel States, per act June 16, 1880	8,221 38
Commutation of rations to prisoners of war in rebel States, per act March 3, 1881	10,305 87
Claims "for quartermaster stores and commissary supplies, act July 4, 1864," per act June 15, 1880, being portion for "commissary" supplies	15,062 29

Claims "for quartermaster stores and commissary supplies, act July 4, 1864," per act March 1, 1881, being portion for "commissary" supplies.....	\$3,192 91	
Subsistence of the Army, 1879	147 25	
Subsistence of the Army, 1880	20,184 15	
Subsistence of the Army, 1881	93 85	
		\$62,789 09
Amounts disbursed by officers of the Subsistence Department and officers doing duty in the Subsistence Department during the fiscal year 1881, as follows:		
Subsistence of the Army, 1880	390,150 14	
Subsistence of the Army, 1881	2,835,953 36	
		3,226,103 50
Amounts dropped by officers doing duty in the Subsistence Department in correction of errors in their accounts during the fiscal year 1881:		
Subsistence of the Army, 1881		260 04
Amount deposited to the credit of the Treasurer of the United States and covered into the Treasury as "miscellaneous receipts on account of sale of public property"		54 10
Amounts carried to the surplus fund on June 30, 1881:		
Subsistence of the Army, 1878 and prior years.....	359 60	
Subsistence of the Army, 1879	28,818 40	
		29,178 00
Total expenditures.....		\$3,318,384 73

BALANCES UNEXPENDED.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1881, as follows:		
Subsistence of the Army, 1880	22,575 45	
Subsistence of the Army, 1881	2 02	
Claims for "quartermaster's stores and commissary supplies, act July 4, 1864," per act March 1, 1881, being a portion for "commissary" supplies	75 60	
		22,653 07
Amounts to the credit of officers of the Subsistence Department, and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositaries, and in their personal possession, on June 30, 1881, as follows:		
Subsistence of the Army, 1880	169 38	
Subsistence of the Army, 1881	412,327 70	
		412,497 08
Amounts refunded to the Treasury near close of fiscal year 1881, but not carried to the credit of the appropriations by June 30, 1881:		
Subsistence of the Army, 1879.....	2 25	
Subsistence of the Army, 1880.....	60 00	
Subsistence of the Army, 1881.....	37 50	
		99 75
Amount in hands of representatives of deceased officer to be collected:		
Subsistence of the Army, 1878.....		109 84
Amounts charged against officers (deceased and resigned) on account of funds alleged to have been lost by theft, &c., as follows:		
Subsistence of the Army, 1879 and prior years		3,000 89
Amounts charged against officers, still in service, on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims under sections 1059 and 1062, Revised Statutes, (including all sums of this character heretofore entered in this statement), as follows:		
Subsistence of the Army, 1879 and prior years.....	2,772 86	
Subsistence of the Army, 1880	393 96	
Subsistence of the Army, 1881	265 47	
		3,432 29
Total balances unexpended.....		\$441,792 92

SOURCES OF SUPPLY OF SUBSISTENCE STORES.

The settled rule of the department of making all purchases of subsistence stores as near the points of consumption as practicable—regard being had to quality and prices, as compared with those of stores procurable at remote places, including cost of transportation—has been adhered to during the fiscal year. Tabular statements of the stores required in bulk for the various military departments where troops are serving in large bodies are, under existing orders, transmitted to the Commissary-General, at proper intervals, who orders the articles from the different purchasing stations; and thus stores of the best quality for Army use obtainable in particular sections or markets of the country are procured. In future it is intended to authorize chief commissaries of departments, after their tabular statements have been acted upon by the Commissary-General, to draw, directly upon the purchasing depots selected by him, at such times and for such quantities named on the tabular statements as in their opinion may be necessary. The Commissary-General will thus select the localities from which the supplies are to be obtained, with a view of obtaining for the Army the best and cheapest articles the markets of the country afford, leaving to the chief commissaries of the departments the details as to quantities and times of the respective shipments, which are often dependent upon or influenced by local contingencies, best known to the chief commissaries themselves.

CONTRACTS AND PURCHASES.

During the fiscal year ended June 30, 1881, 154 newspaper advertisements and 191 circulars and posters, inviting proposals for subsistence stores, were reported to this office. The disbursements for advertising for the year, on accounts approved by the Secretary of War, amounted to \$7,829.45. There were also received, during the same period, 219 contracts for fresh meats, 29 contracts for miscellaneous articles, 34 contracts for complete rations for recruiting parties and recruits, and 2,384 informal contracts made under written proposals and acceptances.

The average price each month of each of the principal components of the Army ration, purchased at the principal subsistence purchasing depots, is reported monthly to the Commissary-General of Subsistence, under the Army regulations. The following table, prepared after the manner pursued in the preparation of like tables heretofore published, exhibits the average for the twelve months of the fiscal year, 1881, of these monthly average prices, taken from the monthly reports referred to, viz:

Average (for the twelve months of the fiscal year ending June 30, 1931) of the monthly average prices paid for the component parts of the ration purchased for the United States Army at the principal purchasing depots.

[illegible]

A statement of the average prices per pound (independent of quantities purchased), in each State and Territory, for fresh beef, supplied to the Army on contract, during the fiscal years 1880, 1881, and 1882, is as follows, viz:

State or Territory.	Average price per pound.			State or Territory.	Average price per pound.		
	1880.	1881.	1882.		1880.	1881.	1882.
	Cents.	Cents.	Cents.		Cents.	Cents.	Cents.
Maine	7.00	8.75	10.50	Michigan	11.41	10.34	10.9
Massachusetts	8.85	8.89	11.38	Missouri	5.98	5.50	4.8
Rhode Island	7.90	6.90	8.00	Minnesota	6.06	5.17	3.1
Connecticut	7.95	7.23	8.97	Nebraska	6.51	7.21	7.2
New York	7.81	7.77	9.54	Kansas	6.45	7.40	7.8
Pennsylvania	9.19	9.37	12.25	Indian Territory	5.49	5.86	5.7
Maryland	7.13	7.93	9.00	Wyoming Territory	6.29	7.19	7.2
District of Columbia	6.00	6.64	8.06	Dakota Territory	8.30	8.79	9.3
Virginia	5.99	6.24	7.00	New Mexico Territory	6.57	7.75	8.3
North Carolina	7.75	7.37	...	Colorado	7.21	7.62	7.8
Georgia	7.06	8.85	9.68	Utah Territory	5.49	5.21	6.0
Florida	7.87	8.62	12.00	Montana Territory	4.16	6.50	6.3
Alabama	10.00	9.00	...	California	5.87	6.92	7.1
Louisiana	6.75	7.75	7.25	Arizona Territory	11.34	10.46	10.7
Arkansas	6.25	6.75	6.97	Washington Territory	5.16	6.73	6.7
Texas	5.43	5.18	5.48	Idaho Territory	7.63	6.65	6.7
Kentucky	5.25	6.50	6.75	Nevada	6.25	7.75	9.3
Ohio	6.00	6.15	7.25	Oregon	6.97	6.12	5.3
Indiana	8.00	8.00	9.00				
Illinois	7.20	8.00	7.00	Average for each year	7.06	7.39	8.1

The amounts expended on account of the purchase of subsistence supplies at the principal purchasing stations during the fiscal year ended June 30, 1881, were as follows:

Purchasing depot at—	For stores.	For property.	Total
Baltimore, Md.	\$35,989 97	\$486 83	\$36,476 80
Boston, Mass.	161,661 94	227 17	161,889 11
Cheyenne, Wyo.	25,908 72	198 82	26,107 54
Chicago, Ill.	450,289 21	6,748 74	457,037 95
Cincinnati, Ohio	13,820 11	242 25	14,062 36
Fort Leavenworth, Kans	206,235 37	8,171 87	214,407 24
Helena, Mont.	24,967 58	224 35	25,191 93
Little Rock, Ark.	211 11	289 50	500 61
New Orleans, La.	46,590 63	464 14	47,054 77
New York, N. Y.	349,318 80	3,141 17	352,459 97
Omaha, Neb.	42,591 52	3,356 28	45,947 80
Vancouver Barracks, Wash	46,432 62	794 55	47,227 17
Prescott, Ariz.	41,744 27	...	41,744 27
San Antonio, Tex.	27,333 61	816 05	28,149 66
Saint Louis, Mo.	103,916 21	921 63	104,837 84
Saint Paul, Minn.	171,202 49	4,481 72	175,684 21
Santa Fé, N. Mex.	7,874 39	18 62	7,893 01
San Francisco, Cal.	155,182 56	4,762 51	159,945 07
Washington, D. C.	126,156 38	1,564 08	127,720 46
Yankton, Dak.	2,071 80	91 00	2,162 80
Totals	2,030,499 31	37,001 28	2,067,500 59

SALES OF SUBSISTENCE STORES TO OFFICERS AND ENLISTED MEN.

The *proviso* which has been introduced in the acts making appropriation for the support of the Army for the past two fiscal years, directing that "to the cost of all stores and other articles [subsistence] sold to officers and enlisted men, except tobacco, as provided for in section 114 of the Revised Statutes, ten per centum shall be added to cover wastage, transportation, and other incidental charges," is considered onerous and

unjust by officers and enlisted men of the Army, and I would respectfully recommend that the *proviso* referred to be recommended by the Secretary of War to be omitted from the appropriation act for the fiscal year 1883, and the following be substituted therefor, viz: "*Provided*, That hereafter sales of articles of subsistence supplies to officers and enlisted men of the Army shall be made at the invoice price of the last lot of the respective articles received by the officers by whom the sales are made."

TOBACCO.

There were supplied to the officers and enlisted men of the Army, during the fiscal year 1881, as appears by the returns of subsistence stores rendered to this office for that period, 216,719 $\frac{1}{8}$ pounds of chewing tobacco, and 75,262 $\frac{2}{8}$ pounds of smoking tobacco.

The value of such of the above tobacco as was furnished enlisted men during the year under section 1149, Revised Statutes, was \$107,658.24. There was collected by the Pay Department from enlisted men on this account, and returned to the appropriations of the Subsistence Department during the same period, the sum of \$68,767.45.

By act of March 3, 1865 (section 1149, Rev. Stat.), Congress directed the Secretary of War to cause tobacco, in quantities not exceeding 16 ounces per man per month, to be furnished to the enlisted men of the Army at cost prices, exclusive of the cost of transportation, the amount due therefor to be deducted from their pay, in the same manner as then provided for the settlement of clothing accounts.

At the succeeding session, by act of July 28, 1866 (section 1144, Rev. Stat.), the office of sutler was abolished, and the Subsistence Department was required to furnish for sales to officers and enlisted men such articles as should be designated for the purpose by the inspectors-general of the Army, and if not paid for when purchased, the amount due to be deducted by the paymaster at the next payment following the purchase.

Measures for carrying into effect the tobacco law (section 1149, Rev. Stat.) were taken as soon as practicable after the passage of the act, and as the statute prescribed that the money due by enlisted men for tobacco should be deducted from their pay as then prescribed for the settlement of clothing accounts, an elaborate system of settlement had to be adopted, involving accountability in both the Subsistence and Pay Departments, and necessitating the making out and handling of many papers in drawing and issuing the tobacco to the enlisted men, in accounting for such issues to the Subsistence Department, in charging such issues against the men on the pay-rolls, in summing up those charges by the Paymaster-General on the pay-rolls of the entire Army, and in the final transfer, on the books of the Treasury, of the aggregates so found due to the appropriations of the Subsistence Department. The system then perfected has continued in operation to the present time. It is not only cumbersome, but, as may be seen, the clerical labor involved in the Pay and Subsistence Departments renders the system very expensive.

Upon investigation it furthermore appears that since the tobacco law first went into operation, up to the date of this report, about \$23,000 worth of tobacco has been issued to the enlisted men of the Army, the money value of which will never be transferred from the appropriations of the Pay Department to those of the Subsistence Department, owing to deaths, desertions, forfeitures, and other contingencies of service occurring after the men had drawn their tobacco and before the next pay day had arrived.

When the law of 1866 (section 1144, Rev. Stat.) came to be put in

operation, the existing system of furnishing tobacco to enlisted men was allowed to remain undisturbed. It has been supposed that section 1149, Revised Statutes, supplemented by section 1301, has vested a *right* in the enlisted men to have the tobacco furnished them on credit if they so elect, while it has been held optional with the Secretary of War whether sales under section 1144 shall be for cash exclusively, or on credit. In my opinion, this distinction between tobacco and other articles is an unreasonable one, and has arisen out of the fact that the two laws were passed at different times and without reference to each other. I can perceive no valid reason why tobacco for smoking purposes, for instance, furnished to enlisted men under section 1149 ought not to be required to be paid for in cash the same as is now required of him for the pipe in which to use it, which is sold him under section 1144. Sales of articles under that section cannot under existing orders be made on credit, except, in certain cases, where men are serving in the field or have not been regularly paid. As the amount of tobacco to be sold each man per month will be limited to the small quantity he can individually consume, it can impose no great hardship upon him if he is required to pay cash for it at time of purchase, during periods when he is regularly paid by the Pay Department.

With the view, therefore, of simplifying the accounts, and consequently of reducing the expenses connected with the furnishing of tobacco to enlisted men, I earnestly recommend that sections 1149 and 1301, Revised Statutes, be repealed, and that section 1144 be amended by inserting after the word "articles," in the third line, the words "including tobacco," so that the latter section will read :

1144. The officers of the Subsistence Department shall procure, and keep for sale to officers and enlisted men at cost prices, for cash or on credit, such articles, including tobacco, as may from time to time be designated by the inspectors-general of the Army. An account of all sales on credit shall be kept, and the amounts due for the same shall be reported monthly to the Paymaster-General.

If the repeal of sections 1149 and 1301, and the amendment of section 1144, hereinabove recommended, be adopted by Congress, tobacco will then take its place among the other articles directed to be kept for sale to officers and enlisted men, and be controlled by the same rules as to quantities to be sold to each individual, &c., resulting in a great simplification of accounts and consequent reduction of the expenses now connected with supplying tobacco to the enlisted men of the Army. I earnestly bespeak the favorable recommendation of the Secretary of War in behalf of the measures here proposed.

SUPPLIES CONDEMNED, LOST, DESTROYED, ETC.

The value of supplies inspected and condemned during the fiscal year ending June 30, 1881, was.....	\$21, 102 69
From such of the above as were sold there was realized the sum of.....	7, 255 32
Net loss on account of supplies condemned.....	<u>13, 847 37</u>
The value of stores reported on such of the returns of the fiscal year ending June 30, 1881, as have been examined, as lost in transportation and no one found responsible therefor, and as extraordinary wastage, &c., was.....	<u>22, 321 59</u>
The value of stores lost in transportation during the fiscal year ending June 30, 1881, where responsibility for the loss has been fixed, was.....	1, 013 40
The amount collected and taken up on officers' accounts, or covered into the Treasury on above account was.....	\$312 35
Collected and not yet covered in.....	32 39
	<u>344 74</u>
Leaving a balance to be collected and accounted for of	662 66

SUFFERERS BY OVERFLOW IN DAKOTA.

During the month of April, 1881, a great freshet in the Missouri River caused the overflow of considerable tracts of land in the vicinity of Yankton, Vermillion and Fort Randall, in the Territory of Dakota. Upon appeals made to the Secretary of War for assistance for the people of the submerged districts, orders were given for the gratuitous issue of Army subsistence supplies to the sufferers. The character and quantities of stores so issued, and the cost thereof to the United States, are indicated by the following table, viz:

Articles.	Yankton and Vermillion, Dak.	Fort Randall, Dak.	Total amounts issued.	Value.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	
Pork.....	9,900	3,572	13,472	\$1,116 54
Bacon.....		3,339	3,339	300 51
Beef, fresh.....	13,475		13,475	1,010 62
Flour.....	27,636	11,734	39,370	1,043 30
Hard bread.....		1,247	1,247	73 57
Beans.....		508	508	12 70
Rice.....		38	38	2 47
Coffee, green.....	1,176½	482	1,658½	264 88
Tea.....	190½	1	191½	64 20
Sugar.....	1,100	576	1,676	157 23
Soap.....		14	14	77
Salt.....	900	14	914	12 07
Yeast-powder.....	588		588	228 12
Potatoes.....		2,431	2,431	12 59
Total cost.....				\$4,299 57

The majority of the people to whom issues were made at Yankton and Vermillion were farmers, the suffering falling heaviest on that class. No extra expense attended the issues at these places for store rent or transportation, &c., as prominent citizens and corporations afforded gratuitously every facility in the work of distribution, several citizens giving the matter their entire time without compensation. Issues at these places began April 14, 1881, and ceased on April 30, 1881. Full rations of flour, green coffee, and tea, and part rations of pork, fresh beef, sugar, salt, and yeast-powder were issued. In issuing, three children below ten years of age were considered equal to two adults. The only extra expense occasioned to the Subsistence Department by the issues to these sufferers, besides the value of the stores themselves, was \$204.44 clerk hire.

OBSERVATION AND EXPLORATION IN THE ARCTIC SEAS.

Subsistence supplies for the expeditionary force to Lady Franklin Bay were directed by the Secretary of War to be provided by the Subsistence Department, and, in pursuance of directions from the Commissary-General of Subsistence, the purchases were made by Maj. J. P. Hawkins, Commissary of Subsistence, New York City, after conferring with the commander of the expedition, First Lieut. A. W. Greely, Fifth Cavalry, acting signal officer. The subsistence stores thus provided were for 4 officers and 21 enlisted men for a period of 395 days, and are to be held for sales to the officers and men of the expedition. The enlisted men were granted \$1 per day "commutation of rations," the same that is allowed enlisted men on duty in the War Department bureaus

in Washington, D. C. The money value of the subsistence supplies sent out, was \$10,309.78; of stationery, weights, measures, &c., for use in connection with those supplies, \$67.78.

POINT BARROW EXPEDITION.

Subsistence supplies for this expedition were also furnished, by direction of the Secretary of War, by the Subsistence Department. As in the case of the Lady Franklin Bay expedition, the enlisted men were granted "commutation of rations" at \$1 per day. The supplies sent out were for 2 officers and 3 enlisted men and 5 civil employes for a period of two years, and were turned over by Maj. Thomas C. Sullivan, Commissary of Subsistence, San Francisco, Cal., on July 13, 1881, to Lieut. P. H. Ray, Eighth Infantry, acting signal officer, commanding the expedition. The money value of the subsistence stores was \$3,533.47; of the stationery, weights, measures, &c., for use in connection with those supplies, \$56.43.

LOSSES OF STORES AND PROPERTY.

The following is a statement of the value of stores and property reported lost by theft, flood, fire, &c., during the fiscal year ending June 30, 1881:

Where lost.	How lost, per reports.	Date of loss.	Value.
Fort McDowell, Ariz.....	By theft.....	Between June 30 and July 12, 1880.....	\$24 50
Fort Brown, Tex.....	By storm.....	August 12, 1880.....	250 04
Fort Bowie, Ariz.....	By theft.....	In August, 1880.....	109 48
Fort Custer, Mont.....	By fire.....	September 10, 1880....	75 51
Camp Thornton, Mont.....	By fire.....	September 22, 1880.....	91 65
Fort Maginnis, Mont.....	By theft.....	In November, 1880.....	24 30
Bismarck, Dak.....	By theft.....	In December, 1880.....	69 31
Chicago, Ill.....	By flood.....	December 30, 1880.....	1,000 00
Whipple Barracks, Ariz.....	By fire.....	January 28, 1881.....	*500 00
Willett's Point, New York Harbor.....	By theft.....	April and May, 1881....	384 68
Fort McDowell, Ariz.....	By ravages of bugs.....	In November, 1880.....	206 94
Total.....			\$3,618 29

*Approximated.

MISCELLANEOUS ISSUES AND EXPENDITURES.

In the month of September, 1880, 1,000 pounds of flour were issued at Fort Davis, Tex., to Mexican troops, under command of Colonel Valle, who were entirely out of provisions. The issue was approved by the Secretary of War, and the flour returned in November, 1880.

Subsistence stores were issued during the fall of 1880 to civilians employed in repair of Mullan road, between Fort Missoula, Montana, and Fort Cœur d'Alene, Idaho, to the value of \$284.53, which amount was refunded to the appropriation Subsistence of the Army, 1881, from the amount appropriated for the repair of that road per act approved June 8, 1880.

The number of rations issued to citizen prisoners during the fiscal year ending June 30, 1881, was 902, and to destitute citizens was 3,531.

The value of the rations issued to Indians during the fiscal year ending June 30, 1881, and not included elsewhere, was as follows:

To Indian prisoners of war.....	\$2,244 99
To Indians visiting military posts under paragraphs 1202 and 1203, Revised Regulations, 1863.....	1,148 73
To friendly Indians.....	236 72
To destitute Indians.....	902 92
Total.....	\$5,153 36

The issues of oil for exterior illumination at the different posts under the provisions of General Order No. 17, Headquarters of the Army, Adjutant-General's Office, series of 1870, during the fiscal year ending June 30, 1881, amount to 7,804 $\frac{3}{4}$ gallons. The amount expended at Columbus Barracks, Ohio, for gas for above purpose was \$360.

Issues of oil and candles for lighting evening schools, post libraries, reading rooms, and chapels have been made under the provisions of paragraph 13, of General Orders No. 24, and paragraph 2, of General Orders No. 84, Headquarters of the Army, Adjutant-General's Office, 1878, during the fiscal year ending June 30, 1881, to the extent of 1,821 $\frac{1}{4}$ gallons of oil and 19,062 pounds of candles. An expenditure of \$50 has also been made for gas for above-named purposes at Columbus Barracks, Ohio.

The amount paid to enlisted men as "commutation of rations" while traveling to and from posts in connection with target firing during fiscal year ending June 30, 1881, was \$1,303.50.

Accounts for the fiscal year ending June 30, 1881, show a disbursement of \$30,211.03, for the subsistence of recruiting parties and recruits, the number of rations paid for being 61,998 $\frac{1}{4}$, and the average cost per ration 48.728 cents, an increase of .775 of a cent per ration over the cost for the previous year.

Statement of supplies issued to Indians and transferred to Indian Department, during fiscal year ending June 30, 1881.

When issued.	Where issued.	To whom issued.	At whose request issued.	Refundment requested.	Subsistence stores.	Transportation.	Total.	Remarks.
July to Dec., 1880	Fort Keogh, Mont	SiouX Indians surrendered as prisoners of war.	Interior Department.	Sept. 28, 1880, to Jan. 27, 1881.	\$22,762 37	\$3,243 51	\$26,005 88	Stores paid for Apr. 30, 1881.
Jan., 1881	do	do	do	Feb. 19, 1881.	5,815 95	857 55	6,673 50	Stores paid for in part Apr. 30, 1881.
Feb. to June, 1881	do	do	do	Mar. 28, 1881, to July 22, 1881.	27,775 70	3,580 15	31,355 85	Stores not paid for.
Totals					56,354 02	7,681 21	64,035 23	
Aug., 1880	Fort Stanton, N. Mex.	Mescalero Apache Indian prisoners.	do	Request not made.	176 51		176 51	Returned in kind.
Dec., 1880, to Apr., 1881.	Hackberry, Ariz.	Destitute Hualpai Indians	do	Jan. 28 to May 20, 1881.	9,497 30		9,497 30	Paid for.
Feb. to Apr., 1881	Fort Mojave, Ariz.	Destitute Mojave Indians.	do	July 27, 28, and 29, 1881.	7,584 05		7,584 05	Not paid for.
July, 1880	Fort Custer, Mont	Destitute Crow Indians	do	Sept. 13, 1880.	140 00		140 00	Do.
Oct., 1880	Fort Omaha, Nebr	Apache Indian boy.	Department commander.	Jan. 11, 1880.	2 02		2 02	Paid for June 20, 1881.
Jan. to June, 1881	Fort Buford, Dak	SiouX Indian prisoners of war.	Post commander.	Request not made.	22,581 90		22,581 90	Not paid for.
Jan., 1881	Camp Poplar River, Mont.	do	do	do	579 53		579 53	Do.
June, 1881	Fort Yates, Dak	do	Interior Department.	Aug. 18, 1881.	9,385 27	1,267 62	10,652 89	Do.
Apr., May, and June, 1881.	Fort Sill, Ind. T.	P. B. Hunt, agent for the Kiowa, Comanche, and Wichita Indians.	do	Aug. 3, 1881.	22,836 96		22,836 96	Do.
Apr., May, and June, 1881.	Fort Reno, Ind T.	John D. Miller, agent for the Cheyenne and Arapahoe Indians.	do	Aug. 3 and 4, 1881.	35,860 96	534 09	36,395 05	Do.
Totals					164,998 52	9,482 92	174,481 44	

RECAPITULATION.

Total money value of subsistence issued during the year	\$164,998 52
Total paid to the Subsistence Department by Indian Department, on account of above stores	\$34,499 82
Returned in kind	176 51
Total paid for and returned	34,675 83
Total not paid for by Indian Department	130,322 69

The support and care of the Indians of the country being committed to a bureau of the Interior Department specially organized for the purpose, and specific appropriations being annually made by Congress to be disbursed under the direction of that bureau, the diversion of funds appropriated for other branches of the government to the payment of the legitimate expenses of the Indian Bureau is, upon whatever grounds it may be urged, a matter of very questionable legality, in view of the various restrictive laws which are spread upon the statute books. Nevertheless, it is a matter of annual recurrence that the appropriations for the support of the Army are called upon to meet current wants and contingencies of the Indian establishment, and although these requests may be coupled with the promise on the part of the Interior Department of securing reimbursement to Army appropriations by Congress, the whole responsibility for such application of appropriations made for other and specific purposes must be assumed, for the time being, by those by whom the expenditure is directed. The constitutional provision that "no money shall be drawn from the Treasury but in consequence of appropriations made by law," and the restraints of section 3678, Revised Statutes, that "all sums appropriated for the various branches of expenditure in the public service shall be applied solely to the objects for which they are respectively made, and *for no others*," must be ignored in all such instances. A strong claim of justification for such exercise of executive authority, in behalf of the restless or starving savages of the frontiers, lies in its pressing necessity oftentimes to prevent an outbreak on the part of the Indians, and in the fact that it is ultimately cheaper for the government to feed the Indians who have a claim upon it for subsistence, than to allow them to engender a state of war. The resources for meeting the latter contingency would necessarily come from the appropriations for the support of the Army, but it appears radically wrong, in the light of the laws above quoted, to leave the War Department, by inadequate provision for the Indian establishment, to be made subject to contribution to that establishment whenever its appropriations shall for any reason become exhausted.

An occasion of this kind occurred in May and June last, when, the Indian appropriations being exhausted, the Subsistence Department, at the request of the Interior Department, and by direction of the Secretary of War, purchased subsistence and issued it, during those two months, to the Arapaho, Cheyenne, Kiowa, Comanche, and Wichita Indians, in the vicinity of Forts Sill and Reno, in the Indian Territory, numbering in all about 10,000 souls. The cost of the subsistence thus issued appears by the above table to have been \$22,836.96, and \$36,395.05, respectively, or a total of \$59,232.01. These supplies were furnished upon the express promise of the Secretary of the Interior that "this department will present the subject to Congress upon the earliest opportunity, and urge upon that body the necessity for an appropriation to reimburse the War Department for such expenditures as shall be incurred in providing for these Indians."

The issues to the Sioux Indians, as prisoners of war at Fort Keogh, during the fiscal year, were made with the approval of the Secretary of War, upon the application of the Secretary of the Interior, in the spring of 1880, for permission for the Sioux from the British Possessions to surrender themselves to the military authorities, and be fed until such time as other arrangements could be made by the Interior Department for their maintenance. The authority of the Secretary of War for such issues did not look to the continued subsistence of these Indians by the Subsistence Department, and bills have been rendered to the Interior

Department for reimbursement, but no such reimbursement has been made since April 30, 1881, presumably because the appropriations of the Indian Bureau became exhausted at or about that time. Another detachment of surrendered Indians came in to Fort Buford in the winter of 1880-'81, and were subsisted at the expense of army appropriations.

The issues to the destitute Mojave Indians, between February and April, 1881, were made at the request of the Interior Department, to preserve peace and prevent suffering, with the understanding that reimbursement would be made from such funds as may have been appropriated by Congress for the Hualpai and other destitute Indians in Arizona. No reimbursement, however, has yet been made on this account.

"ACTING COMMISSARIES OF SUBSISTENCE" AND "ACTING ASSISTANT COMMISSARIES OF SUBSISTENCE."

Section 1261, Revised Statutes authorizes the payment to an "acting assistant commissary" of "\$100 per year in addition to the pay of *his rank*." It is observed that in the printed annual estimates submitted to Congress since 1876 the item for the pay of the Army has included an entry for "acting assistant commissaries of subsistence, in addition to pay *in the line*," and this same phraseology occurs in recent appropriation acts.

In my opinion, this allowance should only be made to *line* officers, and should be confined to subalterns, as was the case at the date of the revision of the statutes in 1874, and had been the case previous to that time for more than fifty years. Under the recent rulings of the accounting officers, however, the extra pay of \$100 per year named in above section has been allowed, as "acting assistant commissaries of subsistence," to staff officers and to officers as high in rank as lieutenant-colonels. The following on the subject is quoted from my report of last year, and I now renew the recommendations then made:

The organization of the Subsistence Department was fixed by the sixteenth section of the act entitled "An act to increase and fix the military peace establishment of the United States," approved July 28, 1866, and all laws and parts of laws in conflict with the provisions of the act were repealed by the thirty-eighth section.

Among the laws so repealed was that portion of the act of March 2, 1821 (section 8), which authorized as many assistant commissaries of subsistence, not exceeding 50, as the service might require, to be taken from the lieutenants of the line.

The appointment of officers as "assistant commissaries of subsistence" was not provided for by the act of July 28, 1866, and no law has since been passed authorizing such appointments.

The Commissary-General of Subsistence, in his annual report of October 19, 1867, expressed the opinion that "it is very desirable that this grade of subsistence officers (viz, assistant commissaries of subsistence) be restored to the service." In this opinion I concur, and would respectfully recommend that Congress be requested to authorize the Secretary of War to appoint from the grade of lieutenant, on the recommendation of the Commissary-General of Subsistence, as many "assistant commissaries of subsistence" as the service may require, not exceeding 50; such officers, while performing duty as assistant commissaries of subsistence, to be paid \$10 per month, in addition to the pay of their rank, and to hold their appointments until canceled by order of the Secretary of War, or by their promotion to the grade of captain. I would also recommend that it be provided by law that where there is no assistant commissary at any garrisoned post, or with any command, the commanding officer thereof may detail an officer to act as assistant commissary for the post or command, who, if a lieutenant, shall be entitled, while performing said duty, to the pay of an assistant commissary of subsistence; and that officers making such details shall forthwith report them to the Commissary-General of Subsistence.

Compensation for performance of the duty of assistant commissaries is thus limited to lieutenants by my recommendation, because if allowed to mounted officers of the rank of captain, or to higher grades, the aggregate pay of such individual officers would exceed that of the individual officers of the Subsistence Department of corresponding grades, which, I think, should not be allowed.

COMMUTATION OF RATIONS IN LIEU OF RATIONS IN KIND.

Payment of money to enlisted men as "commutation of rations" has constituted in late years a very considerable item in the expense of the military establishment.

The Army regulations from 1843 to 1857 fixed the rate of commutation to be paid enlisted men permanently detached, and having no facilities for messing, at 20 cents per ration. The regulations of 1857 changed this rate to "the cost or value of the ration at the post," but allowed 40 cents per day to soldiers "stationed in a city with no opportunity of messing." The latter allowance was increased to 75 cents per day by regulations of 1861, but by the regulations of 1863, commutation to soldiers on furlough, female nurses in hospitals, and to "persons entitled to rations when stationed where the government has not provided subsistence for them" was fixed at "the cost of the ration at the station where it is due." By regulations from 1835 to 1863, the rate of commutation to enlisted men "detached on command," where it was impracticable to carry rations with them, was 75 cents per day. The regulations of 1863 limited this allowance to the period "when a soldier is *traveling* on detached command and it is impracticable to carry rations with him." But I am unable to find any general law (with the exception of sections 1290 and 1294 Revised Statutes), which authorizes the allowance of any money as "commutation" to enlisted men in place of the articles of the ration to be furnished them under sections 1293 and 1146 Revised Statutes. To meet, as far as practicable, this apparent omission in the laws fixing the allowances of enlisted men, this bureau has in recent years included items in its annual estimates looking to provision for the increased cost of subsisting enlisted men detailed to duty in cases where "commutation" has heretofore been allowed them, and the words "for difference between the cost of rations and commutation thereof for detailed men," have been embodied by Congress in the acts for the support of the Army for the fiscal years 1880, 1881 and 1882. Should these words be omitted hereafter from the appropriation acts, the legality of such allowances in excess of the actual cost of the ration might, in my opinion, be properly open to serious objection under section 1765 Revised Statutes, which prescribes that no "additional pay, *extra* allowance, or compensation in *any form whatever*," shall be received by any person whose "salary, pay, or emoluments are fixed by law or regulations," unless the same is, 1st, "authorized by law," and 2d, "the appropriation therefor explicitly state that it is for such additional pay, *extra* allowance, or compensation."

In May, 1862, at a period of inflated prices consequent upon a state of war, the Secretary of War authorized the allowance of commutation of rations at the rate of 75 cents per day to the soldiers employed as clerks and messengers in the departments in Washington City, and on October 1, 1863, this rate was increased to \$1 per day, the monthly commutation of quarters in that city being increased 100 per cent. by the same order, on account of "the great advance of rents." This last order allowing commutation of rations at \$1 per day in Washington remains unchanged to the present day.

In 1868, by orders from the War Department, a "General Service" detachment of enlisted men, intended for duty as clerks, was authorized for each of the military division, department, and district headquarters throughout the country, with power to commanding generals to augment these detachments by details from regiments when necessary, and large rates of commutation were allowed for these services. The number of

men authorized by this order was subsequently changed by other orders until in February, 1880, the entire subject of clerical duty in the Army was referred to a board consisting of the Quartermaster-General, Brigadier-General A. H. Terry, and the Commissary-General of Subsistence. The following is an extract from the report of the board:

The board has been able to find no law authorizing payment to general service and detailed men on extra duty at various headquarters except the annual appropriation bills. These, it learns, provide funds in accordance with estimates of the Quartermaster-General and the Commissary-General of Subsistence, which estimates are submitted by the Secretary of War to Congress. The details of items of the expenditure have not been always set forth in the consolidated estimates laid before Congress, but those original estimates in detail are on file in the office of the Quartermaster-General and of the Commissary-General. No express law authorizes the payment to a soldier of more money as commutation of fuel than his share of the allowance of fuel to his company costs the United States. So of commutation of rations. Rations are not an emolument, but an allowance of food. * * *

The board, therefore, recommends that the number of enlisted men on such duty, general service and detailed, be limited to the number set forth in the following table, that being the number for which appropriation was granted by Congress; that their allowance and commutation of quarters, fuel, and subsistence shall remain as it was fixed when the estimates for the appropriations made by Congress to pay their allowances were made up, and for payment of which rates the appropriation for 1879-'80 has provided funds. These rates are set forth in the accompanying tables. [Both tables omitted here.]

The board recommends that the War Department do not attempt to fix in detail the number of enlisted men, general service or detailed, to be allowed at each separate headquarters in the Army. It recommends that the whole number available under laws and appropriations of Congress for this service be set forth in a general order, and that the General of the Army be authorized by letter of instruction or advice to division commanders to determine the distribution, from time to time, of these men among the divisions and departments according to the exigencies of the service.

A general order was thereupon issued by the War Department adopting the recommendations of the board. As in the case of enlisted men employed as clerks in the War Department and bureaus and offices, the rates of allowance of commutation of rations to these men on duty as clerks at military headquarters, was fixed by order at \$1 and 75 cents per day, and the rate to men detailed as messengers at 50 cents per day.

The prevailing prices of table board paid by various grades of civil employes of the government in the city of Washington at the present time are from \$15 to \$20 per month. The estimated cost of the ration throughout the country is 20 cents. Enlisted men on duty in the War Department and bureaus and offices, however, are given \$30 or \$31 per month as commutation of rations. This excess—of \$10 to \$16 per month—over current prices of board paid to these men can hardly be considered other than an emolument intended to make up from “subsistence” what may be wanting under some other heading of income, which, in their present sphere of employment, is either partially provided for only, or is wholly unprovided for. This deficient heading is most probably “pay,” since these men can only draw the *pay* of the enlisted men of the Army, which is fixed by Congress at from \$13 to \$17 per month, while the rates of “commutation” are not prescribed by that body. The same remarks are in the main applicable to the men on duty as clerks and messengers at the various military headquarters throughout the country. Speaking of this class of men on duty in the Adjutant-General's Office, the Adjutant-General, on December 18, 1880, in answer to Senate resolution of June 15, 1880, said: “Most of these men are excellent clerks, and, although having seen service in the regular or volunteer forces of the country during the late war, are in no sense *soldiers* now, but clerks, and the continuance of the system bur-

the rolls of the Army with men who, except through the formality of appointments, have no place thereon;" and, after full consideration, he only recommended "that the class of clerks known as 'general service' be abolished."

Of those who believe in the wisdom of paragraph 174 of the Army Regulations of 1847, which prescribed that, "As the employment of soldiers' clerks * * * impairs or derogates from the military character it is to be strictly limited and watched."

In the exigencies of administration in the Army were found to require the institution of the independent grades of ordnance-sergeants, commissary-sergeants, hospital-stewards, and the employment of forward wagon masters, hospital matrons and nurses, for the discharge of various military duties connected with these grades and designations. Congress authorized the addition to the Army of the appropriate numbers of these several classes of persons, and prescribed their respective rates of pay, &c., but the same has not been done with reference to the class known as "general service" clerks.

These several classes of men, rated as "general service" clerks, no longer to draw the rations of a soldier when assembled at Washington or at military headquarters, or are in practice actually enlisted in the understanding that "commutation" under various headings is allowed them, I would recommend that, if they are to be continued in service, the matter may be brought specially to the attention of Congress in order that their status as a part of the Army may be prescribed by law, as is done in the case of others whose services are retained in the Army for special purposes, and that the rates of commutation to be allowed them may also be fixed by law. I have ventured to make this recommendation in view of the stringency of section 1765 of the Revised Statutes, which, as before remarked, prohibits additional pay, allowance, or compensation, unless it be, 1st, authorized by law; 2d, the appropriation explicitly states it is for such additional pay, allowance, or compensation.

The following table exhibits the number of men and the rates at which commutation of rations is estimated for the fiscal year 1883:

Character of duty.	Total number of men.	Number of days.	Rate of commutation per day.	Amount.
For clerical service in War Department.....	30	365	\$1 00	\$10,950 00
As clerks, messengers, and watchmen in office of the Adjutant-General.....	127	365	1 00	46,355 00
For clerical service in the office of the Surgeon-General.....	20	365	1 00	7,300 00
For clerical service in the office of Commissary-General of Subsistence.....	10	365	1 00	3,650 00
For clerical service in the office of the Chief of Ordnance.....	20	365	1 00	7,300 00
In the office of the Chief of Engineers.....	20	365	1 00	7,300 00
For clerical duty in the office of the Quartermaster-General.....	12	365	1 00	4,380 00
As clerks, messengers, and watchmen in office of Chief of Engineers.....	5	365	1 00	1,825 00
As clerks and messengers in office of Geographical Survey, Washington, D. C.....	8	365	1 00	2,920 00
In the office of the Inspector-General, Washington, D. C.....	1	365	1 00	365 00
In the office of the United States Army Dispensary, Washington, D. C.....	4	365	1 00	1,460 00
In the office of the Medical Purveyor, Washington, D. C.....	1	365	1 00	365 00
At the headquarters of the Army, Washington, D. C.....	7	365	1 00	2,555 00
Clerks (general service) at headquarters, military division.....	4	365	1 00	1,460 00
Clerks (general service) at headquarters general recruitment office.....	1	365	1 00	365 00

Character of duty.	Total number of men.	Number of days.	Rate of commutation per day.	Amount.
Signal Service enlisted men on duty in office of Chief Signal Officer.....	125	365	\$1 00	\$45,625 00
Signal Service enlisted men on signal duty at various signal stations.....	13	365	1 00	4,745 00
Signal Service enlisted men on signal duty at Lady Franklin Bay and Point Barrow, Alaska.....	20	365	1 00	7,300 00
On detached duty at Lady Franklin Bay and Point Barrow, Alaska.....	24	365	1 00	8,760 00
Enlisted clerks (general service) at headquarters military divisions, departments, and districts.....	148	365	75	40,515 00
Enlisted clerks (general service) at headquarters general recruiting service.....	7	365	75	1,916 25
On detached duty in various capacities at military posts.....	14	365	75	3,832 50
Signal Service enlisted men on signal duty at various signal stations.....	272	365	75	74,400 00
On detached duty as repairmen of United States telegraph lines.....	80	365	75	21,900 00
Traveling on detached duty.....	75	365	1 50	41,062 50
Detailed as messengers at headquarters military divisions, departments, and districts.....	60	365	50	10,950 00
Detailed as messengers at headquarters general recruiting service.....	2	365	50	365 00
Ordnance sergeant at Sandy Hook, N. J.....	1	365	50	182 50
Ordnance sergeants on duty at ungarrisoned posts.....	40	365	40	5,840 00
On furlough.....	432	365	25	39,420 00
Total	1,583	.....	.....	403,433 75

The enlisted men of the Signal Corps on duty at the various signal stations throughout the United States, with few exceptions, are allowed by the Secretary of War to draw commutation of rations at the rate of 75 cents per day. In the cases of 13 signal men outside of Washington and 125 in Washington, \$1 per day is at present allowed. Rations in kind for 70 men only of the signal service are estimated for the fiscal year 1883. I find nothing in the statutes to exempt the enlisted men of the Signal Corps from the operation of sections 1293 and 1146 of the Revised Statutes, but as nearly all these men now draw "commutation," I would recommend that the number of men of that corps to whom commutation of rations shall be paid and the respective rates of commutation of rations to be allowed them may be fixed by law. This recommendation I make upon the same grounds as in the case of "general service" men above.

I have estimated in the estimate for subsistence of the Army for the fiscal year 1883, for commutation of rations for enlisted men *traveling* on detached duty at the rate of \$1.50 per day. My opinion is that this sum is not at this time in excess of the average cost per diem of meals at points along lines of transportation throughout the country, and I think enlisted men traveling on detached duty, when it is impracticable to cook rations or to carry cooked rations, should be enabled to procure subsistence in the mode in which ordinary travelers usually procure their meals. I would recommend that even this amount may be authorized to be increased by the Secretary of War, in special cases of travel in the Territories and elsewhere where the cost of subsistence is known to be much in excess of the prices to be paid in more densely populated localities.

ARMY COOKING.

I invite the attention of the honorable Secretary of War to the following extract from my annual report for 1879, and urgently recom-

mend that the attention of Congress may be invited to the subject, as one of the utmost importance, both in an economical and sanitary point of view:

ARMY COOKS AND BAKERS.

On the 8th of November, 1876, I stated, in a communication to the honorable Secretary of War:

"I am of the opinion that the efficiency of the Army would be materially increased, and desertions lessened, were a cook enlisted for each company with extra pay, say \$4 in excess of the pay of a private, and schools for the instructions of cooks established at the recruiting depots at Fort Columbus, N. Y., and Columbus Barracks, Ohio."

In my annual report for the year 1876, I stated:

"I also think that bakers should be specially enlisted, paid extra-duty pay, say \$4 per month, and assigned to posts as commissary-sergeants. I recommend that should schools for cooks be established at recruiting depots, bakers should also be instructed at the same schools."

I again invite the attention of the honorable Secretary of War to this subject in connection with the following extract from the report of the board on Army cooking, convened by General Orders No. 117, Headquarters of the Army, Adjutant-General's Office, series of 1877:

"The Army needs the enlistment of men who have an aptitude for cooking, and the establishment of a school for their education in the economy of the kitchen. * * *

"Extra compensation is allowed to enlisted men when on duty as mechanics, artisans, and laborers when performing such work, but none to the company cook, whose duty, if conscientiously done, is the most onerous performed by the enlisted men. Eight hours is the time fixed for the labor of the extra-duty men, who are rated and paid as such. The duties of the competent and conscientious company cook commence two hours before reveille, and frequently are not concluded before tattoo. The wear and tear of the clothes of a company cook is double that of any enlisted man in the same company, yet the cook receives no extra compensation therefor, whilst the carpenter, blacksmith, or laborer detailed from the same company does."

"An important aid to good soldiering is good cooking. This cannot be obtained without good cooks, and good cooks cannot be obtained without education and adequate compensation. If one company cook, while actually performing duty as such, was allowed 50 per cent. advance on his clothing allowance, and a monetary compensation of 30 per cent. per day, to be paid either from the Subsistence Department or the Quartermaster's Department, a class of men would be secured to the Army who would economically use the ration, cook it acceptably, and be anxious to retain his position for the extra compensation it brings, whilst at present he is only glad to be relieved from kitchen duty for lighter work."

I respectfully urge the Secretary of War to invite the attention of Congress to this subject, believing the subject one of the utmost importance in connection with the health, comfort, and efficiency of the enlisted men of the Army.

I would respectfully recommend the adoption of the following draft of a law intended to accomplish the object desired, viz:

There shall hereafter be enlisted, for each battery of artillery, troop of cavalry, and company of infantry in the service, under such regulations as the Secretary of War shall prescribe, a competent person as cook, whose clothing allowance shall be those of a private soldier, but whose pay proper shall be at the rate of twenty-two dollars per month, whose duty it shall be to cook the rations of the battery, troop, or company, under such regulations as may be prescribed under section 1174, Revised Statutes; *provided*, that cooks so enlisted shall not be entitled under any circumstances to extra-duty pay; and *provided further*, that the introduction of the grade into the Army shall not have the effect of increasing the strength of the Army beyond the number of men now authorized by law.

FIELD OVENS.

A board of officers consisting of Maj. George Bell, commissary of subsistence, Capt. Thomas B. Robinson, Nineteenth Infantry, First Lieut. C. B. Hall, Nineteenth Infantry, and Second Lieut. C. H. Hunter, Nineteenth Infantry, recorder, was convened by Special Order No. 262, Headquarters Department of the Missouri, Fort Leavenworth, Kans., series of 1880, to make a thorough and complete test of such field ovens as might be submitted to it. The report of the board has been received,

and the revision of the pamphlets heretofore issued by the Subsistence Department on the subject of ovens has been made by Maj. George Bell, commissary of subsistence. It is the intention to publish to the Army the results of these experiments with ovens for field service, as well as notes upon the construction of permanent ovens for military posts.

THE SOLDIER'S RATION AND THE POST AND COMPANY FUNDS.

In the spring of 1880, a discussion sprang up in the department of Texas concerning the sufficiency, or insufficiency, of the present army ration. Under the direction of the commanding general of that department, and at the request of Surgeon J. R. Smith, medical director of the department, statistics of the company funds of the 78 companies in the department, for the average period of 17 months, and of savings of the post bakeries in the department during the same period, were collected. The *data* thus derived were subsequently subjected to a thorough and masterly reduction and analysis by Surgeon Smith, a copy of whose report, with the indorsements of the chief commissary of subsistence and the commanding general of the department of Texas, and of the Commissary-General of Subsistence thereon, is appended to this report and marked Appendix A. A review of this report was subsequently made by Col. John Gibbon, Seventh Infantry, at Fort Snelling, Minn., in connection with statistics gathered from the companies of the Seventh Infantry; and this review and the original report of Surgeon Smith were in turn reviewed by the chief commissary of subsistence and the medical director of the department of Dakota. These papers are also hereto appended, marked Appendix B.

The army ration, exclusive of the soap and candle components, was originally furnished by the government to the soldier solely for the purposes of alimentation; but ever since the Army Regulations of 1835 (see page 99 of those regulations) the flour component has been made tributary to the "post fund," to the extent of about one-third of the flour issued, wherever troops bake their own bread, and by the regulations issued after the passage of the law of July 5, 1838 (5 Stat. at Large 256)—which directed the issue of sugar and coffee in place of the former spirit or whisky component, and prescribed that "when not so issued, to be paid in money"—all the articles composing the ration, excepting flour, have been made tributary to another fund called the "company fund" (see Army Regulations, 1841, page 32). This fund accrues not only from the sale of sugar and coffee under the law, but from all other ration-articles, excepting flour, which are saved or not consumed by the men. In place of articles so saved, the company commanders receive from sales thereof the money value, and the fund thus accumulated (and added to from other minor sources) becomes the "company fund."

These laws and regulations are substantially in operation at the present time, and the obligation of the government to furnish subsistence to the soldier is practically fulfilled by the following system of issues and diminutions, viz:

1. The greater portion of each of the components of the full ration, drawn in kind, is consumed by the soldier.

2. A portion of some or of each of the components, excepting flour, not wanted by him, or not supposed to be needed by him under the varying contingencies of garrison or field duty, is not consumed by him, but its money-value, arising from the sale thereof by his company commander, is applied to the formation of the "company fund."

3. One-third of the flour to which he is entitled is, in garrison or wher

a post bakery can be erected, diverted from him to pay the cost of baking the remaining two-thirds; this diversion, aided by the tax on the post-trader, if one be present, constituting the "post-fund."

If the post fund and the company fund are not, as such, to be considered longer available for procuring subsistence for the soldier when once accumulated, and he becomes hungry upon the quantity of food that is actually prepared for him, it is obvious that the rights of the enlisted man, under sections 1293 and 1146, Revised Statutes, are in a measure defeated, since the legal effect of those sections is to vest in him a right to an allowance of provisions sufficient for his daily subsistence, and this right ought not to be any more subject to unnecessary diminution than are his rights to his pay and other allowances under Title XIV, chapter 3, of the Revised Statutes.

For what purposes, then, are the post and company funds made available by the orders creating them?

The following are the objects (see General Orders No. 24, Headquarters of the Army, Adjutant-General's Office, 1878, as amended by General Orders No. 19, Headquarters of the Army, Adjutant-General's Office, 1881), to which the post fund (a portion of which is disbursed as a "regimental" fund), are applied, viz. As post fund: 1st. Expenses of bake-house; 2d. Garden seeds and utensils (for all troops serving at the post); 3d. Post schools; 4th. Post library and reading rooms; 5th. Gymnasium; 6th. Chapel; 7th. Fruit and shade trees; 8th. Fruit-bearing vines and bushes; 9th. Printing press. As regimental fund: 1st. The maintenance of a band; 2d. When not needed for the band it may be transferred to the companies of the regiment as company fund.

The following are the objects (see General Orders Nos. 24 and 19, above cited) to which the company fund, "the savings arising from an economical use of the rations of the company, excepting the saving of flour," are to be applied for the exclusive benefit of the enlisted men of the company, viz: 1st. For enlisted men's mess; 2d. For garden seeds and utensils; 3d. For such exercise and amusements as may be, in the judgment of the company commander, for the benefit or comfort of the majority of the enlisted men of the company.

All these institutional comforts of the soldier are, then, to be provided for and maintained, not from direct congressional appropriations for the purpose, but indirectly at the expense of his allowance of food. What, then, is the remedy when soldiers "show symptoms of need of more food"?

Surgeon Smith submits:

That the soldier receive the whole of his ration, or the product of its barter in the shape of food.

The commanding general Department of Texas says:

The appropriation of money derived from the sale of any part of the soldier's rations to other purposes than providing food in greater variety is, in my opinion, contrary to law.

The chief commissary of subsistence of the Department of Texas says:

It should, however, be a principle established by regulations, that whatever the government allows as a ration, must, if sold, be replaced by its equivalent in food to the soldier.

Colonel Gibbon recommends:

That all expenditures of company funds be prohibited except for the purchase of food for the men.

The chief commissary of subsistence of the Department of Dakota says:

There should be nothing purchased with the proceeds of "savings" of the ration but food.

The medical director of the same department says:

The initial step in all efforts to improve the diet of the soldier should be to prohibit the expenditure of the proceeds arising from the sale of saved portions of the ration for anything but food.

Surgeon T. A. McParlin, U. S. A., in his report upon the nutritive value of the Army ration in 1875, recommended that it be ordered:

That no savings from the food portion of the ration shall be expendable for anything but food.

To increase the ration, as has been proposed by some officers, while the post and company funds and the institutions which they support are retained, will be to increase *pro tanto* the cost of subsisting the Army. Holding the views I do, as expressed in my indorsement of June 1, 1881, on Surgeon Smith's report, I cannot concur in the proposition of an increase until it shall be shown in actual service that the *full ration* now prescribed for the soldier is, when wholly consumed by him, either in kind or in nutritive equivalents obtained by barter, insufficient to completely satisfy his daily desires for food. As touching the subject of the sufficiency of the present ration, I append hereto, marked Appendix C, extracts from a letter of the late Commissary-General Eaton to the General of the Army in 1873, in the spirit of which I fully concur.

ACCOUNTS AND RETURNS.

There were received during the fiscal year ending June 30, 1881, from 516 officers performing duty in the Subsistence Department, the following accounts and returns, viz:

Accounts current.....	2,746
Returns of provisions.....	2,500
Returns of commissary property.....	938

Total received 6,184

During the same period there were examined in this office, and forwarded to the Third Auditor for settlement, the following:

Accounts current.....	2,666, accompanied by 38,153 vouchers.
Returns of provisions.....	2,281, accompanied by 32,168 vouchers.
Returns of commissary property.....	822, accompanied by 2,099 vouchers.

Total 5,769, accompanied by 72,420 vouchers.

In connection with the above there were 3,935 letters written, and 1,025 referred by indorsements, and 289 papers copied.

In addition to the above, returns of official postage-stamps to the number of 786, accompanied by 2,234 vouchers, have been examined and filed.

CLAIMS.

Act of July 4, 1864 (Section 300 B, Revised Statutes).—At the commencement of the fiscal year ending June 30, 1881, there were on file in this office, awaiting examination, 2,079 claims, under the third section of the act of July 4, 1864, and the acts and joint resolutions supplementary to said act, and during the year 32 more were received, making, in all, 2,111 to be acted upon. Formal decisions were rendered, during this period, in 249 cases of this class of claims. Of these, 33, amounting to \$4,054, were allowed, and recommended to the Third Auditor of the Treasury for payment; and 216, amounting to \$160,644.90, were rejected. The number decided embraced 21 cases, re-examined upon additional evidence, of which 1 was allowed, and 20 again rejected.

There remained on hand on July 1, 1881, awaiting examination and decision under this act, 1,862 claims.

Joint resolution of July 25, 1866, and third section of act of March 2, 1867.—At the commencement of the fiscal year there were on file in this office 2,644 claims for commutation of rations to Union soldiers while held as prisoners of war, and during the year 997 claims were received, making a total of 3,641 claims of this class for examination, &c. Of these, 17 were not reached for examination; 2,329 were partially examined; 1,295 examined and decided, of which 842 were rejected, and 453, amounting to \$13,057.50, were allowed and recommended to the Third Auditor of the Treasury for payment. Besides this, 6 rejected (old) claims were re-examined upon additional evidence, 1 of which, amounting to \$3, was allowed, and 5 again rejected.

Miscellaneous claims.—In addition to claims under the above-mentioned special acts of Congress, there were at the commencement of the fiscal year 532 miscellaneous claims on hand, and during the year 207 claims were received. Of these 739 claims, 122 were recommended for payment in the aggregate sum of \$15,067.17; 126 were rejected; 420 have been partially examined; and 71 were not reached for examination. Besides this, 10 rejected (old claims) were re-examined upon additional evidence, 7 of which, amounting to \$96.90, were allowed, and 3 again rejected.

Letters and indorsements.—In connection with the three classes of claims above mentioned, 11,127 communications were sent out during the year, and many briefs of evidence and extended examinations of records and reports were made.

CLERICAL AND OTHER FORCE IN THE OFFICE OF THE COMMISSARY-GENERAL OF SUBSISTENCE.

I have the honor to renew my recommendation of last year that Congress be urgently requested to allow to this office the following number and grades of employés, in lieu of the number and grades now authorized and employed, viz: One chief clerk; 2 clerks, class 4; 4 clerks, class 3; 5 clerks, class 2; 12 clerks, class 1; 5 clerks, class \$1,000 (temporary); 1 messenger; 1 assistant messenger; 2 watchmen; 2 laborers. This force is absolutely required to perform the ordinary duties of the office, the 5 temporary clerks at \$1,000 being required in connection with the examination of claims (now greatly in arrears), and to be retained only until such time as those claims are so far reduced in number as to be within the capacity of the regular force.

This reorganization of office *personnel* contemplates the discontinuance of the use of enlisted men as now resorted to. I believe that the necessary force should all be civilians, and that no part of the appropriations for the support of the army should be devoted to the payment of enlisted men for the performance of duties that are wholly of a civil nature.

DUTIES AND STATIONS OF OFFICERS OF THE SUBSISTENCE DEPARTMENT.

The duties and stations of officers of the Subsistence Department on the 10th of October, 1881, will appear from the roster hereto appended.

During the year the officers of the department have been actively and efficiently employed.

Very respectfully, your obedient servant,

R. MACFEELY,
Commissary-General of Subsistence.

Hon. the SECRETARY OF WAR.

Roster of the Subsistence Department, United States Army, October 10, 1881.

Name and rank in the department.	Rank by brevet.	Duty and station.
COMMISSARY-GENERAL OF SUBSISTENCE.		
<i>Brigadier-General.</i>		
Robert Macfeely.....	.....	Commissary-General of Subsistence.—Washington, D. C.
ASSISTANT COMMISSARIES-GENERAL OF SUBSISTENCE.		
<i>Colonels.</i>		
Charles L. Kilburn	Bvt. Brig. General, March 13, 1865.	Chief C. S., Mil. Div. of the Pacific and Dept. of California—Presidio of San Francisco, San Francisco, Cal.
Marcus D. L. Simpson.....	Bvt. Maj. General, March 13, 1865.	Chief C. S., Mil. Div. of the Missouri.—Chicago, Ill.
<i>Lieutenant-Colonels.</i>		
Henry F. Clarke.....	Bvt. Maj. General, March 13, 1865.	Chief C. S., Mil. Div. of the Atlantic and Dept. of the East.—Governor's Island, New York, N. Y.
William W. Burns.....	Bvt. Brig. General, March 13, 1865.	Purchasing and Depot C. S. at Baltimore, Md.
Amos Beckwith	Bvt. Maj. General, March 13, 1865.	Purchasing and Depot C. S. at Saint Louis, Mo.
COMMISSARIES OF SUBSISTENCE.		
<i>Majors.</i>		
Beckman Du Barry.....	Bvt. Colonel, March 13, 1865.	On leave of absence.
Thomas J. Haines	Bvt. Brig. General, March 13, 1865.	On sick leave.
George Bell.....	Bvt. Brig. General, April 9, 1865.	Chief C. S. Dept. of the Missouri, and Purchasing and Depot C. S. at Fort Leavenworth, Kans.
Michael R. Morga	Bvt. Brig. General, April 9, 1865.	Chief C. S., Dept. of Dakota, and Purchasing and Depot C. S. at Fort Snelling, Minn.
John P. Hawkins.....	Bvt. Maj. General, March 13, 1865.	Purchasing and Depot C. S. at New York City, N. Y.
Michael P. Small	Bvt. Brig. General, April 9, 1865.	Chief C. S., Dept. of Texas, and Purchasing and Depot C. S. at San Antonio, Tex.
Thomas C. Sullivan.....	Bvt. Lieut. Colonel, March 13, 1865.	Purchasing and Depot C. S. at San Francisco, Cal.
John W. Barriger	Bvt. Brig. General, March 13, 1865.	Purchasing and Depot C. S. at Chicago, Ill.
<i>Captains.</i>		
Thomas Wilson.....	Bvt. Brig. General, March 13, 1865.	Chief C. S. Dept. of the Platte, and Purchasing and Depot C. S. at Omaha, Nebr.
William H. Bell	Bvt. Major, March 13, 1865.	Purchasing and Depot C. S. at Washington, D. C.
Jeremiah H. Gilman.....	Bvt. Lieut. Colonel, Dec. 31, 1862.	Assistant to the Commissary-General of Subsistence.—Washington, D. C.
Samuel T. Cushing.....	Bvt. Major, March 13, 1865.	Chief C. S., Dept. of the Columbia, and Purchasing and Depot C. S. Vancouver Barracks, W. T.
William A. Elderkin	Bvt. Major, March 13, 1865.	Purchasing and Depot C. S. at Cheyenne, Wyo.
Charles B. Penrose	Bvt. Lieut. Colonel, Nov. 11, 1867.	Chief C. S., Dept. of the South, and Purchasing C. S. at Cincinnati, Ohio, on temporary duty in office Commissary-General Subsistence, Washington, D. C.
William H. Nash	Bvt. Major, Nov. 17 1865.	Purchasing and Depot C. S. at Boston, Mass.
Charles P. Eagan .....	.....	Chief C. S., Dept. of Arizona, Prescott, Ariz.
Fred. F. Whitehead	Bvt. Major, March 2, 1867.	Purchasing and Depot C. S. at New Orleans, La.
John F. Weston .....	.....	Purchasing and Depot C. S. at Helena, Mont.
Charles A. Woodruff .....	.....	Chief C. S., District of New Mexico, and Post C. S. at Fort Marcy, New Mexico.—Santa Fé, N. M.
John J. Clague .....	.....	On duty at Saint Paul, Minn.

APPENDIX A.

THE ARMY RATION, AND THE POST AND COMPANY FUNDS.

HEADQUARTERS DEPARTMENT OF TEXAS,
MEDICAL DIRECTOR'S OFFICE,
San Antonio, Texas, November 3, 1880.

To the Assistant Adjutant-General, Headquarters Department of Texas :

SIR: I have the honor to return, herewith, Circular Letter No. 1, containing the letters of General Stanley and Captain Poole, on the insufficiency of the soldiers' ration, and accompanying papers, with the following synopsis thereof, and some remarks concerning them. The circular letter is as follows :

[Circular Letter No. 1.]

HEADQUARTERS DEPARTMENT OF TEXAS,
San Antonio, Texas, March 29, 1880.

The COMMANDING OFFICER,
Fort ———, Texas :

SIR: The commanding general has directed me to invite your attention to the accompanying communication, with inclosure, from the commanding officer district of the Nueces, to the end that your views, and those of the post surgeon, may be reported to these headquarters.

When replies shall have been received from all the posts of this department, it is the intention of the commanding general to make an earnest effort to secure a *sufficient* increase of the ration.

Very respectfully, your obedient servant,

THOMAS M. VINCENT,
Assistant Adjutant-General.

"HEADQUARTERS DISTRICT OF THE NUECES,
"Fort Clark, Texas, March —, 1880.

"ASSISTANT ADJUTANT GENERAL,
"Department of Texas, San Antonio :

"SIR: I have the honor to inclose the within communication of Captain Poole, but with very little hope that it will effect anything.

"This subject of the insufficiency of the ration for men in camp, on the march, or employed as laborers, is as old as the army, probably. After the expedition to the Upper Yellowstone, under my command, in 1873, I forwarded to the honorable Secretary of War a petition signed by, I think; fifty-five officers of the expedition, men of experience, setting forth the insufficiency of the bread ration in the field, and respectfully asking an increase of one-quarter pound of hard bread or flour to the ration in the field. So far as I now know, not the slightest notice was ever taken of this paper. Where and by whom it got its quietus I cannot say; but the fact is indisputable that working parties and troops in the field are kept in a constant state of hunger, and I have always regarded it as a wonder that the proper authorities seem to have never comprehended that the necessary food for soldiers in garrison and in the field are two things entirely distinct; and further, I have always looked upon it as a shame that in these United States, of all countries in the world the most bountifully supplied with provisions, soldiers should be required to do hard duty in a continual state of hunger, and upon a ration far inferior, in quantity, to the ration of the British or any continental army. Volunteers would not stand it for a month. During the Mexican war and the late civil war, the first move in the Subsistence Department was to increase the ration, and, in each case, to reduce it again so soon as the war ended. The engineers have always found it necessary to issue one ration and a half to their employés.

"I know all I have said will be met with the rebuttal that the ration is larger than it was from the war of 1812 until the Mexican war, and that it has been sufficient for scouting parties and expeditions for many years, and is so yet. This, however, is a fallacy. When Fort Leavenworth, and the posts on the Mississippi, were the frontier posts of the country, there was not a military post in the territory of the United States which did not have gardens, and even fields, where produce could be, and was, raised, doubling the bulk of the ration; and for soldiers on the plains, previous to the date of the destruction of the buffalo, parties and expeditions had unlimited meat. All this has changed. The majority of military posts are now situated where any cultivation of the soil is fruitless, and the buffalo are gone.

"I will argue this no further, but will assert that all soldiers in the field, or on fatigue duty, are constantly hungry; and I recommend that the flour and hard bread

ration be increased one-quarter pound, for each, and the bacon one-quarter pound, the fresh beef one-half pound, for all men in the field or when employed as laborers in the Quartermaster's Department, or upon fatigue duties, whether for one day or a longer period. For the correctness of what I have written regarding the continual hunger of soldiers under the circumstances stated, I confidently refer to any officer of experience who has seen service in our western Territories.

“Very respectfully, your obedient servant,
“D. S. STANLEY,
“Colonel Twenty-second Infantry, Commanding.”

[First inclosure.]

“FORT CLARK, TEXAS, March 8, 1880.
“ACTING ASSISTANT ADJUTANT-GENERAL,
“District of Nueces, Fort Clark, Texas:
“SIR: In connection with the late work performed by Companies A, 24th Infantry, E. 20th Infantry, and H, 22nd Infantry, at the ford crossing the Pecos River, and at other points on the new road from Fort Clark to Fort Davis, Texas, I have the honor to report, for the information of the district commander, upon the insufficiency of the meat and bread ration issued to the enlisted men while engaged in continuous marching or hard labor. As an illustration of the case, I take H Company, 22nd Infantry, with forty-nine (49) enlisted men present for duty, from February 3rd, ultimo, until the 6th instant. This company has marched one hundred and sixty (160) miles, and worked at hard labor, digging a canal across a bend in Pecos River, cutting chaparral, and removing rock from the road mentioned. During the above dates I have found it necessary, to satisfy the wants of the men, to purchase, in addition to the ration issued, one hundred and forty-one (141) pounds of fresh beef, four hundred and fifty (450) pounds of flour, nine (9) bushels of sweet potatoes, and five (5) bushels of Irish potatoes; at the same time have had economical company cooks who have had over eight (8) years' experience in the garrison and in the field.
“After a number of years' observation, I am satisfied that the present ration is sufficient for garrison duty, but is inadequate for the field, and have to respectfully urge the district commander to recommend an increase of eight (8) ounces of fresh beef, four (4) ounces of bacon, and four (4) ounces of flour, to the present ration issued to enlisted men when called upon to perform manual labor, or when making marches covering a period of not less than one month.
“Very respectfully, your obedient servant,
“D. C. POOLE,
“Captain Twenty-second Infantry, Commanding Company H.”

The accompanying papers are fourteen letters of post surgeons, and twenty-three of line officers, of whom thirteen are company commanders, and ten field officers. Of the fourteen medical officers, three, viz, Assistant Surgeons King, Comegys, and Powell, express the opinion that the ration is insufficient under all circumstances. One fails to express definitely his opinion, but from his language I infer that he considers the ration rather imperfect and ill-managed than deficient. One reports that “The men of this command have been amply provided for with the ration issued them, yet, in my opinion, it would be better if some vegetables could be added, especially potatoes, canned tomatoes and canned corn.”

Four recommend a specific increase, as follows:

	Flour.	Fresh beef.	Bacon.	Hard bread.	Beans.	
Dr. Meacham..	4 ounces	8 ounces ..	4 ounces ..	.....	.....	For troops doing hard labor.
Dr. Waters....	4 ounces	4 ounces ..	4 ounces ..	4 ounces ..	1-20 lb....	For troops doing hard labor.
Dr. Girard	4 ounces or even more.	.....	.....	.....	.....	For troops doing hard labor.
Dr. King	10 ounces ...	8 ounces ..	Proportionately .....	.....	.....	For troops doing hard labor.
	6 ounces	4 ounces ..	Proportionately .....	.....	.....	For troops in garrison.

The remaining medical officers either, in terms, concur with General Stanley, or express the opinion that the ration should be increased for men in the field, or doing hard labor.

Of the twenty-three field and company officers:

Colonel Otis says that "at least the quantity of flour and fresh meat should be slightly increased for troops campaigning, or when sent out as working parties."

Colonel Neill thinks that, in addition to the increase in the field, cavalrymen should have at least 20 ounces of bread under all circumstances.

Major Wilcox thinks that "in camp the ration should be 22 ounces of flour or soft bread, with a fair proportion of potatoes or onions."

Major Sumner is inclined to think that bread and meat may be insufficient.

Captain Morris thinks the increase "equally necessary, both in field and garrison."

Captain Irvine thinks the ration is "wholly inadequate for the support of the troops in the performance of either garrison, field, or fatigue duty."

Captain Bentzoni thinks the ration insufficient in garrison as well as in the field.

Colonel Stanley and Captain Poole are of the opinion that the ration is sufficient for garrison duty, but inadequate for the field, and recommend, for all men in the field or upon fatigue duties, or employed as laborers in the Quartermaster's Department, that the "flour and hard bread ration be increased one-quarter pound, for each, and the bacon one-quarter pound, and the fresh beef one-half pound." Their letters were published in Circular Letter No. 1, from these headquarters, and this circular was sent to the other officers, line and medical, to elicit their opinions.

Except the foregoing specific views, all of these twenty-three line officers and fourteen medical officers agree, generally, with Colonel Stanley and Captain Poole, that the soldier's ration in the field is insufficient, and it is this view to which I shall direct particular attention.

The concurrent opinion of so many men of intelligence and experience cannot be lightly set aside, and I proceed to consider what evidence is offered in support thereof, and whether the opinions can be legitimately deduced from the facts in the case.

This question of the sufficiency of the soldier's ration is not a new one, and has been approached in a variety of ways, the favorite mode appearing to be an effort to establish an artificial standard of the amount, by weight, of food of various kinds needed to sustain an adult in good health. This amount has never been accurately and absolutely decided, although hypothetical figures have been given by various writers, and this because there are so many uncertain elements entering into the matter.

It is notorious that different individuals consume different amounts of food in a normal state, and the *desire* for food, i. e., appetite, is a different thing from the *need* for food. The need for food varies according to age, individual idiosyncrasy, bodily health and activity, and mental activity; according to external temperature, and according to the physical condition of the food itself.

When we consider further that *slightly* excessive or *slightly* insufficient feeding may be so long in producing indisputable consequences as to render any *experimentum crucis* extremely difficult, or almost impossible, we may easily understand the reason why the question remains unsettled, and unsettled it is. I have no hesitation in asserting that, notwithstanding the many reports and tables of grains of water-free and other foods, the question of the *exact* amount of food needed to sustain an adult in health is yet undetermined, if not undeterminable.

Dr. Tanner fasted for forty days, and still survives. The white men with Lieutenant Schwatka, in polar regions, learned to prefer, like the Esquimaux, fat and blubber, and thrive on such diet; and very many sensible people are known as vegetarians, and only eat vegetable food.

The feeding of prisoners in various reformatory institutions has approached nearest to rigorous experiment in this direction. The tables showing the daily ration of soldiers in different armies, as published in the Report on the Hygiene of the Army, page XLI, *et seq.*, give no definite information of the food consumed by the soldier, because it is supposed that the soldier will add by purchase or foraging to the amounts authorized for issue, and this has led Colonel Stanley to the erroneous impression that in these United States "soldiers are required to do hard duty upon a ration far inferior, in quantity, to the ration of the British or any continental army."

On looking at the tables above referred to, great variation is seen in the size of the different rations, amounting to many thousand grains.

According to Parkes (Practical Hygiene, page 150), the British soldier on home service pays the government 4½d. per day for 12 ounces meat and 16 ounces bread, while for additional bread, potatoes, &c., he pays 3½d. per day, either in market or to government.

In France, the ration in time of war is smaller than in time of peace. Parkes, page 154, *op. cit.*, says that it varies according to the contribution which the men make themselves, as in England.

Of the ration of the Prussian soldier, Parkes says that the soldier pays "for his food," (a table given) "and for a very small quantity of fresh vegetables, the soldier pays a little over 1½d. daily; as this is insufficient, he is obliged to buy food for himself."

Hammond says, Treatise on Hygiene, page 560, speaking of the ration of bread and

meat of the British soldier: "This is charged to the soldier at 3½d. per day abroad, or 4½d. per day at home. Coffee, sugar, &c., or whatever else he may need, is purchased by himself from his own funds." Of the ration in the Crimea, he says: "For this ration, a stoppage of 4½d. was made daily against each soldier."

Finally, Dr. Billings says (page XL, *op. cit.*): "A comparison of the rations allowed to their armies by different countries is interesting as a comparison of opinions, but affords no data as to comparative value, for the reason that the legal ration is never that which the soldier actually gets to eat. Either by deductions or exchange, or additions from the labor or pay of the soldier, the actual bill of fare is usually very different from the ration allowance. I give the following table of different rations, therefore, as of theoretical rather than actual issues." In comparing these rations, that amount should be excluded which the soldier must buy; for the American soldier, too, may buy that amount, and more besides.

But to return to the facts of the case. To prove the correctness of the opinions set forth as to the insufficiency of the soldier's ration, it should be shown: 1st, that the soldier has a certain allowance of food authorized by law; 2d, that he receives this allowance; and, 3d, that after receiving and consuming it he is still hungry, or rather shows symptoms of need of more food.

In point of fact, the only evidence offered has been this: 1st. That a certain allowance is authorized by law; and, next, that men, especially in the field, are often hungry, and both in garrison and the field, often buy additional and other food than that they have received as their ration. But one link in the chain of reasoning is wanting. No evidence has been offered that the soldier receives the amount of food allowed him by law as a ration, nor has it been pretended to show what disposition is made of this allowance. I have deemed it important to try and fill up this hiatus.

With this end in view, the assistant adjutant-general of the department has, at my request, called on company commanders in this department for an itemized abstract of their company funds from January 1, 1879, to May 31, 1880, showing the receipts and disbursements.

He has also called on post-commanders for a report of the amounts saved (*to some one*, though lost as food to the soldier) by baking the ration of flour in a post bake-house, and issuing to the soldier a given weight of bread instead of flour.

Reports were received from every company serving in this department, being from seventy-eight companies, some of which were in garrison, some changing station, and some participating in active military operations. All that were received are included in the tables as given below.

The First Infantry was serving in the Department of Dakota during the period embraced in its report. The whole Twenty-second Infantry was in the Department of Dakota for three months of the time, and four companies of the regiment for nine months additional.

Three companies of the Tenth Cavalry served in the Department of the Missouri during the period embraced in their report.

The other troops were scattered throughout this department from the mouth of the Rio Grande to Fort Griffin in the north and Davis in the west.

I.—Table showing the amounts received in and expended from the company funds of the Eighth Regiment of Cavalry from January 1, 1879, to May 31, 1880.

Company.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
A.....	\$340 31	\$340 31	\$538 03	\$14 10	\$553 03	—\$212 72	This table embraces 17 months, except in the cases of Companies B and C, for 16 months. In three companies, A, G, and L, each company had bought more than it has received from all sources into the fund, and the fund is in debt to the commander.
B.....	491 41	\$89 13	580 54	514 36	16 58	530 94	49 60	
C.....	613 50	74 88	687 38	572 00	97 80	670 70	17 24	
D.....	518 94	231 99	750 93	690 84	9 00	690 84	51 00	
E.....	608 40	255 54	863 94	609 88	56 36	756 24	107 70	
F.....	1,137 74	43 75	1,181 49	864 02	54 75	918 77	262 72	
G.....	847 61	3 57	851 18	830 17	38 37	868 54	— 17 36	
H.....	1,074 43	24 57	1,099 00	1,058 01	6 60	1,064 61	34 39	
I.....	761 46	34 61	796 07	646 35	12 12	658 47	97 60	
K.....	1,339 63	.....	1,339 63	1,210 40	25 24	1,235 70	104 13
L.....	541 25	2 03	543 28	555 02	.....	555 92	— 12 64
M.....	765 00	13 84	778 84	734 63	43 81	778 04	80	
Total..	9,040 54	773 41	9,813 95	8,956 67	374 73	9,331 40	482 55	

II.—Table showing the amounts received in and expended from the company funds of the Tenth Regiment of Cavalry from January 1, 1879, to May 31, 1880.

Company.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
A . . .	\$374 21	\$144 77	\$518 98	\$357 58	\$45 00	\$402 58	\$116 40	Report of Companies D and F for 15 months.
B . . .	375 50	.. ..	375 50	333 57	25 43	359 00	16 50	
C . . .	898 26	50 05	948 31	544 87	40 47	585 34	262 97	Report of Companies C, E, H, K, and M for 17 months.
D . . .	370 62	.. ..	370 62	281 73	26 20	307 93	62 69	
E . . .	592 13	29 63	621 76	505 30	52 75	558 05	63 71	Report of Companies A, B, G, and I for 18 months.
F . . .	568 41	256 39	844 80	628 95	42 70	671 65	173 15	
G . . .	224 46	120 76	345 22	250 19	22 50	272 69	65 53	Report of Company L for 19 months.
H . . .	760 12	71 47	831 59	529 21	107 22	636 43	201 16	
I . . .	262 25	.. ..	262 25	128 08	49 05	177 13	85 12	
K . . .	529 87	9 22	539 09	388 68	70 55	459 23	72 86	
L . . .	578 90	134 16	713 06	457 53	182 21	639 74	121 32	
M . . .	838 15	87 00	925 15	784 86	120 69	905 55	32 13	
Total	6,394 88	897 45	7,292 33	5,277 95	740 74	6,017 79	1,274 54	

III.—Table showing the amounts received in and expended from the company funds of the Second Artillery from January 1, 1879, to May 31, 1880.

Battery.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
E . . .	\$411 00	\$20 67	\$431 67	\$333 27	\$20 94	\$354 21	\$77 46	All these reports embrace the period from January 1, 1879, to June 1, 1880—17 months.
F . . .	577 67	24 17	601 84	614 51	.. ..	614 51	—12 67	
G . . .	418 32	214 20	632 52	448 75	18 57	467 32	165 20	The fund of battery F is in debt to the battery commander.
L . . .	714 46	50 25	764 71	703 21	17 40	720 61	88 10	
Total	2,115 45	309 29	2,424 74	2,099 74	54 91	2,154 65	270 09	

IV.—Table showing the amounts received in and expended from the company funds of the First Infantry from January 1, 1879, to May 31, 1880.

Company.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
A . . .	\$409 25	\$8 52	\$507 77	\$439 30	.. ..	\$439 30	\$68 47	Reports of Companies A, B, H, I, and K are for 17 months.
B . . .	227 42	89 93	317 35	171 23	\$50 94	222 17	36 18	
C . . .	573 66	18 62	592 28	495 57	23 22	517 79	74 49	Reports of Companies C, D, E, F, and G are for 18 months.
D . . .	411 65	41	412 06	389 62	11 30	400 92	11 14	
E . . .	378 97	28 06	406 03	303 44	24 20	327 64	77 39	
F . . .	617 92	205 97	823 89	663 88	42 15	706 03	317 86	
G . . .	669 93	147 45	817 38	491 93	81 73	573 66	243 72	
H . . .	494 47	125 74	620 21	478 98	32 56	511 54	108 67	
I . . .	554 43	2 57	557 00	448 76	74 34	523 12	33 88	
K . . .	369 48	30	369 78	272 90	27 50	300 40	69 38	
Total	4,997 18	566 57	5,563 75	4,155 63	306 94	4,520 57	1,041 18	

V.—Table showing the amounts received in and expended from the company funds of the Twentieth Infantry from January 1, 1879, to May 31, 1880.

Company.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
A.....	\$603 64	\$321 18	\$923 72	\$400 45	\$134 88	\$535 33	\$328 39	These reports are for 17 months, except F, for 15, and A, for 16 months.
B.....	337 32	21 02	358 34	303 64	45	304 09	55 15	
C.....	528 79	52 00	580 79	563 94	15 40	579 34	2 85	
D.....	244 94	143 63	388 57	242 64	19 55	262 19	126 58	
E.....	467 26	1 04	468 30	454 48	2 80	456 88	11 62	
F.....	478 82	44 02	522 84	450 72	40 85	491 07	31 17	
G.....	313 38	18 43	330 81	270 45	10 03	280 48	41 33	
H.....	407 71	208 60	616 31	452 88	10 25	463 13	147 18	
I.....	279 99	5 05	285 04	239 77	19 70	259 47	26 47	
K.....	520 44	289 43	809 87	537 23	17 65	555 08	254 79	
Total	4,180 19	1,107 80	5,287 49	3,976 20	286 26	4,262 46	1,025 03	

VI.—Table showing the amounts received in and expended from the company funds of the Twenty-second Infantry, from January 1, 1879, to May 31, 1880.

Company.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
A.....	\$514 86	\$74 44	\$589 30	\$301 68	\$28 85	\$330 53	\$258 77	All reports for 17 months, except Company E, for 16 months.
B.....	780 30	315 03	1,095 33	904 36	40 73	945 09	150 24	
C.....	520 79	94	614 73	480 32	22 12	502 44	112 29	
D.....	159 87	23 47	183 34	155 03	18 03	173 06	10 28	
E.....	151 57	151 27	302 84	103 22	17 90	121 12	181 72	
F.....	181 34	130 60	311 94	141 20	27 85	169 14	142 80	
G.....	683 58	50 02	733 60	723 48	10 40	733 88	0 72	
H.....	600 23	90 39	690 61	635 55	27 52	663 07	27 54	
I.....	414 32	128 55	542 87	408 36	9 32	417 68	125 19	
K.....	371 33	72 01	443 34	404 97	22 07	427 04	16 30	
Total	4,508 88	804 49	5,313 37	4,809 86	199 51	5,009 37	304 00	

VIII.—Table showing the amounts received in and expended from the company funds of the Twenty-fourth Infantry from January 1, 1879, to May 31, 1880.

Company.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
A.....	\$151 64	\$0 44	\$152 08	\$117 32	\$24 00	\$141 32	\$11 76	Report of Company H is for 15 months. Reports of Companies B, D, E, and I are for 17 months. Reports of Companies A, C, G, and J are for 18 months. Report of Company K is for 20 months.
B.....	276 81	8 75	285 56	221 73	9 71	231 44	54 12	
C.....	461 00	4 15	465 15	360 45	57 07	417 52	47 63	
D.....	467 62	22 59	490 21	383 27	34 56	417 83	72 38	
E.....	420 59	80 00	500 59	346 19	34 43	380 62	120 97	
F.....	128 69	6 66	135 35	84 14	46 07	130 21	5 14	
G.....	362 71	31 83	394 54	347 03	30 74	377 77	16 77	
H.....	640 26	148 59	788 85	708 84	47 24	756 08	32 77	
I.....	412 37	31 18	443 55	379 69	24 96	404 65	38 90	
K.....	439 36	180 85	620 21	413 61	35 96	449 57	170 64	
Total	3,753 04	524 13	4,277 17	3,373 77	405 44	3,779 21	497 96	

VIII.—Table showing the amounts received in and expended from the company funds of the Twenty-fifth Infantry from January 1, 1879, to May 31, 1880.

Company.	Amount received in company fund.	Amount on hand December 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.	Remarks.
A.....	\$452 79		\$452 79	\$318 45	\$65 84	\$384 09	\$68 70	Reports of Companies D and E are for 15 months.
B.....	193 86	\$21 55	215 41	167 26	22 00	189 26	26 15	
C.....	379 16	1 00	380 22	230 24	47 24	283 48	96 74	Reports of Companies A, B, C, G, H are for 17 months.
D.....	359 24	20 89	371 33	312 82	8 93	330 75	40 58	
E.....	509 69	15 81	590 50	613 34		613 34	—6 84	Reports of Companies F, I, K are for 18 months.
F.....	411 97		411 97	235 63	43 16	278 69	133 28	
G.....	398 05	39	398 44	378 49	52 95	391 44	5 00	The fund of Company E is in debt to its commander.
H.....	300 20	51 93	352 23	224 79	80 65	305 44	46 79	
I.....	417 72	509 08	1,016 20	432 77	337 56	790 33	226 47	
K.....	598 52	283 99	882 51	541 63	40 08	581 73	300 78	
Total	4,091 40	994 80	5,086 20	3,452 44	696 11	4,148 55	937 65	

IX.—Table showing, by regiments, the amounts received in and expended from the company funds from June 1, 1879, to May 31, 1880.

Regiments.	Amount received in company fund.	Amount on hand Dec. 31, 1878.	Total company fund.	Amount expended in articles of food.	Amount expended for articles other than food.	Total expended.	Amount remaining on hand.
Eighth Cavalry	\$9,040 54	\$773 41	\$9,813 95	\$8,056 67	\$374 73	\$8,431 40	\$482 55
Tenth Cavalry	6,394 88	897 45	7,292 33	5,277 05	740 74	6,017 79	1,274 54
Second Artillery	2,115 45	309 29	2,424 74	2,009 74	54 91	2,154 65	270 09
First Infantry	4,997 18	566 57	5,563 75	4,155 63	386 94	4,522 57	1,041 18
Twentieth Infantry	4,180 19	1,107 30	5,287 49	3,976 20	286 28	4,262 48	1,025 03
Twenty-second Infantry ..	4,588 68	804 49	5,393 17	4,809 86	190 51	5,000 37	454 00
Twenty-fourth Infantry	3,753 04	524 13	4,277 17	3,373 77	403 44	3,779 21	497 96
Twenty-fifth Infantry...	4,091 40	994 80	5,086 20	3,452 44	696 11	4,148 55	937 65
Total	39,141 56	6,007 44	45,209 00	36,101 36	3,124 64	39,226 00	5,983 00

REMARK.—This report is for an average period of a little more than 17 months, and from 78 companies.

The first nine tables show the amounts received into, expended from, and remaining in the company funds of troops serving in this department, for the periods embraced in their reports. The first eight give these figures by companies, while the ninth gives the figures consolidated by regiments.

It appears from these tables that \$39,141 56 was the whole amount received into the fund, and \$36,101 36 the amount expended for food; that is, \$3,040 20 less than the amount received. It further appears that \$3,124 64 was spent for other articles than food, and that \$5,983 00 remained in the hands of the company commanders available for food, if in the judgment of the commanders it was necessary or desirable so to use it. All the companies, save four, report expenditures for other articles than food, the largest amount thus expended by any one company being \$337 56.

Thirty-eight companies report their expenditures larger than their receipts, and forty report their income greater than their expenditures.

Five companies, with minus mark in the last column, report their expenditures so much greater than their income as to leave them in debt to their company commander, and the case of one of them is especially noticeable. On the first of January, 1879, this company owed to its commander the sum of \$156 36. So far from liquidating any of this debt in the ensuing seventeen months, it increased it by the sum of \$212 72, so that the company commander was the creditor by the amount of \$369 08. At this rate it is difficult to see how this company can ever free itself from debt.

Three companies used the whole or part of their saving (as reported in the last column) for the payment of debts contracted before the period embraced in this report. One company paid thus \$62.69, one \$24.06, and one \$58.10. As my whole report, however, is intended only to embrace the transactions after January 1, 1879, no other notice than this mention is taken of the above described payments of old debts.

The company receiving the largest amount into its fund was Company K, Eighth Cavalry, which reports the receipt of \$1,339.83 in seventeen months. Of this amount, \$82.95 was received from the sale of other articles than the ration issued by government—potatoes, Irish and sweet, dried apples, onions, sirup, mincemeat, and pigs being the articles thus sold.

On the other hand, Company F, Twenty-fourth Infantry, is the company receiving the smallest amount into its fund, which is reported as only \$128.69 in seventeen months.

Similar variation appears in the whole amount expended from the fund. Thus: Company K, Eighth Cavalry, report an expenditure of \$1,235.70 in seventeen months, while Company E, Twenty-second Infantry, reports an expenditure of only \$121.12 in sixteen months, and Company F, Twenty-Fourth Infantry, an expenditure of only \$130.21 in seventeen months.

In the amount of expenditure for food is included the ten per cent. extra paid to the Subsistence Department for all articles purchased from it during the greater portion of this time. This ten per cent. amounted to the sum of at least \$1,265.02.

I say "at least," because, while every company was subject to this tax and, I doubt not, paid it, four companies have failed to report the amount thus paid during the whole period, and a number of other companies have similarly failed to report the amount thus paid during a portion of the period during which the tax was collected.

Of the amount, \$3,124.64, reported as expended for the purchase of articles other than food, the sum of \$1,147.67 was expended for table furniture. The remainder was expended for a great variety of articles, as appears in the following list:

Aprons, balances (spring), balls, banjo, bats, barrels, basins, blacking (shoe), blacking brushes, bluing, books, bones, bookbinding, braid, bran, bricks, calico, candlesticks, can-opener, casters, cigars, clarinet, cleavers, clocks, cloths (table), coffee-mills and pots, coffin-tacks, cooking utensils of most every kind, cornets, cribbage-boards, decoration paper, dippers, dishes, dominoes, emery cloth, engines, firecrackers, fish-hooks and lines, forks (silver-plated and iron), gauze, glue, guitar, gunpowder, handles, hay, hats, hinges, knives (silver-plated and iron), labor, lace, lanterns, locks, lye (concentrated), maps, matches, memorandum books, mirrors, mouse-traps, music (sheet), muslin, nails, netting, newspapers, nutmeg graters, oil cloths, ovens, padlocks, pails, pens of all sorts, paper (writing), percussion caps, periodicals, pitchers, plates, platters, plows, polish (shoe), pots of all kinds, postage, printing, repairs of clocks, cooking utensils, furniture, &c., rubber bands, sacks, saucepans, sausage machines, saws, scales, scoops, screws, seamstresses, shot, skillets, sieves, spoons, sprinklers, steels, strings (violin), tacks, tambourine, tinware, tools (carpenter), towels, triangle, tubs, tumblers, twine, umber (burnt), urns, violin, violoncello, water jars, washing clothes, wire gauze, wood for fuel, wooden ware.

The following articles are also reported as paid for from the company fund, whose classification as necessary articles of food is at least doubtful: Beer, brandy, candy, candles, garden seeds, nuts, olive oil, soap (Castile and hard), whisky, wine, and expressage on food and other articles; and not always were such articles bought in trifling amounts.

Reports are made of purchase of \$5 to \$10 worth of oilcloth at a time. Twenty dollars is paid for a plow; a charge of \$34.84 appears for "mess-hall furniture"; \$86 is paid for a nickel-plated coffee urn; and in one company appears the items of \$296.14 for two mess chests.

Certainly it would seem that some soldiers were not suffering from hunger when these purchases were made.

For articles other than food each colored regiment expended more than any white regiment. Indeed, the thirty-two colored companies expended for such purposes \$1,842.29, or \$559.94 more than the forty-six white companies, which thus expended \$1,282.35.

X.—Table showing the amounts accrued to company funds of the Eighth Regiment of Cavalry from sales of different articles, as below named.*

Company.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
A	\$242 20	\$1 94	\$5 45	\$65 24	.....	.....	.....	.....	\$2 23	\$2 92	\$20 33
B	271 04	27 42	.....	121 41	.....	.....	\$2 50	.....	.....	7 60	31 44
C	304 02	1 73	6 42	198 09	\$12 98	.....	49 35	.....	.....	29 85	17 41
D	134 06	.....	.....	.....	.....	.....	.....	.....	.....	.....	7 32
E	220 58	1 15	35 58	145 30	.....	\$0 90	55 75	\$0 73	1 27	94 75	29 28
F	466 17	4 00	19 01	244 54	16 40	.....	117 18	.....	23 44	175 28	60 64
G	446 35	.....	7 01	162 54	.....	1 95	84 94	3 22	17	79 98	28 77
H	660 02	7 72	17 71	150 63	1 00	8 75	32 69	99	9 66	37 37	33 02
I	456 63	.....	22 07	159 17	2 86	.....	59 36	20	.....	31 58	20 04
K	534 67	63 06	26 92	317 57	53 00	.....	.....	.....	29 08	187 82	39 76
L	328 04	.....	6 24	121 48	.....	.....	35 44	2	4 57	32 49	16 98
M	322 87	4 00	.....	186 57	.....	.....	78 24	.....	.....	54 05	12 89
Total ...	4,386 65	111 02	146 47	1,872 54	86 24	6 60	515 45	5 16	70 42	733 69	317 88

* These sales are those reported for 17 months, except in the case of Company D, which includes but 7 months, and Companies B and C, which embrace 16 months each.

XI.—Table showing the amounts accrued to company funds of the Tenth Regiment of Cavalry from sales of different articles, as below named.

Company.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
A	\$117 10	\$10 28	.....	\$68 17	.....	.....	\$3 04	.....	.....	.....	\$8 80
B	208 23	.....	\$0 47	135 31	\$15 25	.....	.....	.....	.....	.....	8 45
C	408 61	6 33	18 10	348 38	47 32	.....	24 45	.....	\$4 20	\$5 50	32 47
D	196 23	.....	8 00	88 09	.....	.....	1 60	.....	.....	.....	.....
E	245 35	29 76	38	105 45	12 44	\$3 60	.....	\$12 11	56	9 65	25 30
F	238 90	2 99	1 15	85 99	5 92	.....	10 84	.....	.....	15	20 70
G	64 23	4 89	1 83	54 85	.....	.....	1 80	.....	.....	2 10	6 42
H	249 49	28 16	8 55	154 80	33 60	.....	20 55	.....	5 00	9 03	27 80
I	86 98	.....	9 91	54 63	.....	.....	.....	.....	6 35	.....	5 00
K	173 19	43 01	.....	212 80	3 00	.....	.....	1 00	.....	.....	17 52
L	261 50	18 89	.....	140 91	19 75	.....	7 31	.....	.....	7 62	.....
M	353 58	15 75	3 22	176 92	24 00	.....	27 26	1 50	.....	84 08	3 00
Total ...	2,603 49	160 06	57 61	1,626 30	161 28	3 60	96 85	14 61	16 11	118 13	155 46

REMARKS.—Report of Company F embraces 9 months. Reports of Companies H and M embrace 11 months. Reports of Companies D and E embrace 12 months. Reports of Companies G and L embrace 13 months. Reports of Companies A and I embrace 15 months. Reports of Companies C and K embrace 17 months. Report of Company B embraces 18 months.

XII.—Table showing the amounts accrued to the company funds of the Second Regiment of Artillery from sales of different articles, as below named.

Battery.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
E	\$98 60	.....	\$8 70	\$50 03	.....	\$0 20	\$21 55	.....	\$1 14	\$45 76	\$5 19
F	254 76	.....	9 06	165 36	\$16 84	.....	1 95	.....	.....	105 28	24 35
G	200 46	.....	18 45	79 34	.....	.....	65 45	.....	.....	34 58	18 41
L	357 25	\$18 95	21 21	162 83	.....	.....	7 11	.....	.....	91 57	17 94
Total ...	911 07	18 95	57 42	457 56	16 84	20	96 06	.....	1 14	277 17	65 89

REMARKS.—Reports of Batteries F, G, and L embrace 17 months. Reports of Battery E are full for 5 months, and partial for 8 months.

XIII.—Table showing the amounts accrued to company funds of the First Regiment of Infantry from sales of different articles, as below named.

Company.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
A	\$87 27	\$13 65	\$3 22		\$105 00		\$9 40				\$0 35
B	94 02	18 10	30	\$18 36		\$1 25	18 92				
C	83 68	23 40	30	74 18	7 80	90	15 03	\$0 03	\$0 32	\$74 14	14 94
D	227 87	6 43	60	75 21	28 26		4 60			54 51	
E	115 91		7 34	51 78						13 05	5 29
F	426 94	34 59	3 45	27 02	72 68		56 35	4 79	3 14		12 65
G	135 00						12 60				
H	309 06	1 50	80	70 56			11 30			5 25	20 12
I	181 05		20	121 45	39 50		45	4		74 47	30
K	293 87			40 71	45		20 06	45			13 93
Total.....	1,954 67	97 67	16 21	479 26	253 69	2 15	148 71	5 31	3 46	221 42	67 58

REMARKS.—Sales of Companies A and H are for 11 months. Sales of Companies C, E, and G are for 12 months. Sales of Companies B, I, and K are for 17 months. Sales of Companies D and F are for 13 months.

XIV.—Table showing the amounts accrued to company funds of the Twentieth Regiment of Infantry from sales of different articles, as below named.

Company.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
A	\$126 86	\$1 37	\$16 22	\$50 00					\$0 67	\$40 29	
B	131 99			68 57			\$36 80			32 92	\$1 50
C	165 81		4 09	92 72	\$2 50		7 58		2 59	65 06	9 62
D	97 13		2 49	56 06		\$0 77	8 43	\$0 55	28	16 81	7 19
E	160 02			63 78	10 00	30	8 10	60		33 21	12 81
F	157 63		5 84	74 68	4 50				2 16	25 97	11 00
G	92 61	11 96		86 03			17 31			21 96	7 29
H	114 78			61 38			12 34			37 07	14 24
I	103 42		2 66	65 14		1 20	14 78		1 10	22 45	15 48
K	162 57	65	1 50	155 88			2 93	20		14 41	19 06
Total.....	1,312 82	13 98	32 80	774 29	17 00	2 27	108 27	1 35	6 80	310 15	106 81

REMARKS.—Sales of Companies E and F are for 9 months. Sales of Company A are for 10 months. Sales of Companies C and H are for 11 months. Sales of Companies B, D, G, I, and K are for 14 months.

XV.—Table showing the amounts accrued to company funds of the First Regiment of Infantry from sales of different articles, as below named.

Company.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
A	\$279 29	\$3 82	\$3 19	\$146 98			\$63 80	\$1 78		\$121 76	\$20 24
B	264 02	47 96		125 13		\$2 95			\$2 10	71 18	4 56
C	122 21	8 88	64	87 20						20 02	
D	15 82	1 10		15 70	\$5 00				71	1 50	
E	8 85		91	25 37						16 33	86
F	85 79			78 90			1 65			15 00	
G	391 54	20 26	88	163 11			10 76	63	90	92 60	2 46
H	88 20	9 05	5 00	43 92			6 85			5 55	
I	258 01	14 32	7 29	84 95			6 52			33 33	5 90
K	201 93		4 34	58 13		1 50	5 95			12 48	
Total.....	1,755 66	105 39	22 25	829 39	5 00	4 45	95 53	2 41	3 71	389 75	33 84

REMARKS.—Sales of Company D are for 6 months. Sales of Companies E and H are for 7 months. Sales of Company C are for 8 months. Sales of Company B are for 11 months. Sales of other companies are for 17 months.

XVI.—Table showing the amounts accrued to company funds of the Twenty-fourth Regiment of Infantry from sales of different articles, as below named.

Company.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
A	\$31 02	.....	\$6 84	\$85 63	\$4 53	.....	.....	\$0 80	.....	.....	\$22 82
B	29 86	\$10 87	13 73	193 43	.....	.....	\$6 94	2 66	.....	.....	15 86
C	175 00	2 64	24 56	154 45	.....	\$1 89	49 43	2 40	\$1 40	\$9 19	17 64
D	154 26	10 54	10 43	264 70	.....	.....	23 67	54	.....	15 69	24 92
E	165 80	.....	2 01	234 92	.....	.....	50 48	43	.....	13 02	5 80
F	96	7 23	.....	92 67	.....	.....	3 66	4 93	.....	.....	19 24
G	136 05	.....	24 33	135 82	.....	11	47 45	1 48	.....	.....	16 49
H	218 60	2 25	9 87	291 07	.....	.....	55 21	23	.....	12 19	13 66
I	161 59	.....	29 62	168 16	.....	.....	26 91	38	1 81	.....	21 35
K	144 30	.....	20 48	120 99	50	2 33	43 29	1 73	5 95	.....	16 60
Total.....	1, 217 44	83 53	141 87	1, 741 84	5 03	3 83	307 04	15 58	9 16	50 09	174 38

REMARKS.—Sales of Company H are for 9 months. Sales of Company E are for 12 months. Sales of Company D are for 14 months. Sales of Companies B and F are for 17 months. Sales of Companies A, C, G, and K are for 18 months. Sales of Company I are for 20 months.

XVII.—Table showing the amounts accrued to company funds of the Twenty-fifth Regiment of Infantry from sales of different articles, as below named.

Company.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
A	\$156 93	\$15 76	\$1 45	\$94 20	\$20 18	\$0 10	\$1 90	\$0 18	\$1 30	\$5 85	\$1 58
B	74 10	.....	.....	55 08	.....	.....	.....	.....	.....	40 56	.....
C .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
D	121 05	.....	3 80	101 27	18 00	.....	2 64	.....	.....	.....	.....
E	276 45	.....	.....	185 45	21 25	.....	.....	.....	.....	.....	.....
F .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
G	142 02	10 99	.....	94 80	12 70	.....	1 04	.....	.....	.....	20 58
H	64 09	1 81	.....	83 38	.....	.....	1 32	.....	.....	.....	2 08
I .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
K	164 61	11 23	7 74	70 08	42 73	.....	9 89	.....	.....	29 75	5 40
Total.....	999 25	39 79	12 99	684 26	114 86	10	16 79	18	1 30	76 16	29 64

REMARKS.—Reports of Company E are for 6 months. Reports of Company D are for 9 months. Reports of Companies A, G, H, and K are for 11 months. Reports of Company B are for 17 months. No reports from Companies C, F, and I.

XVIII.—Table showing, by regiments, the amounts accrued to company funds from sales of different articles, as below named.

Regiment.	Pork or bacon.	Beans.	Candles.	Coffee.	Flour.	Pepper.	Rice.	Salt.	Soap.	Sugar.	Vinegar.
8th Cavalry	\$4, 386 65	\$111 02	\$146 47	\$1, 872 54	\$86 24	\$6 60	\$515 45	\$5 16	\$70 42	\$733 69	\$317 88
10th Cavalry	2, 603 49	160 06	51 61	1, 626 30	161 28	3 60	96 85	14 61	16 11	118 13	155 46
2d Artillery	911 07	18 95	57 42	457 56	16 84	20	96 06	.....	1 14	277 17	65 89
1st Infantry	1, 954 67	97 67	16 21	479 26	253 69	2 15	148 71	5 31	3 46	221 42	67 58
20th Infantry	1, 312 82	13 98	32 80	774 29	17 00	2 27	108 27	1 35	6 80	310 15	108 81
22d Infantry	1, 755 66	105 39	22 25	829 39	5 00	4 45	95 53	2 41	3 71	389 75	33 84
24th Infantry	1, 217 44	33 53	141 87	1, 741 84	5 03	3 83	307 04	15 58	9 16	50 09	174 38
25th Infantry	999 25	39 79	12 99	684 26	114 86	10	16 79	18	1 30	76 16	29 64
Total	15, 141 05	580 39	481 62	8, 465 44	659 94	23 20	1, 384 70	44 60	112 10	2, 176 56	953 48

REMARK.—This report is for an average period of a fraction less than 14 months, and from 75 companies.

The foregoing nine tables (ten to eighteen, inclusive) give the amounts of each article of the soldier's ration sold by company commanders for the benefit of the company fund, as reported for the periods therein indicated. The first eight tables give the amounts by companies, and the ninth table the same amounts consolidated by regiments. As the period embraced in these reports includes all parts of the year, and all kinds of service, it is probable that about the same proportion of articles sold would obtain for all periods.

In analyzing these tables, one of the first things remarked is that the summing up of the amounts received from sale of components of the soldier's ration does not equal, by a large sum, the amount received into the company fund, as shown by the first nine tables—and this for the following reasons: The fund received money from various other sources than the sale of component parts of the ration, and at one time or another seems to have traded in almost every article of food that could be purchased—certainly from the Subsistence Department, if not from outside sources.

From the board of citizens the not insignificant sum of nearly \$900 was received into the fund.

Potatoes and onions were sold; fresh pork, fresh vegetables, and live stock, corn husks, tea, and flavoring extracts.

One company reports sales of "sundries," \$24.12; another sales of "slush, no items," \$12.10; another reports sale of "company property," \$1.25; and another reports "sales of which no account was kept," \$10.50. At one time a single sale is made of \$10.80 worth of yeast powder, and another a single sale of \$8.80 worth of baking powder.

The further reason exists that in most of the company reports for the first six months of 1879 the aggregate amount of sales of savings is given, and no items. This aggregate amount is, of course, embraced in the first nine tables, but not in the subsequent ones. The company commanders were not required to report the items of sales, and, habitually, did not do so until July, 1879.

The sales reported in these tables are for an average period of nearly fourteen months, for seventy-five companies (three companies of the Twenty-fifth Infantry not having reported this), and foot up an aggregate of \$30,023.08, realized as follows:

From sales of pork or bacon.....	\$15,141 05
From sales of coffee	8,465 44
From sales of sugar	2,176 56
From sales of rice.....	1,324 70
From sales of vinegar	953 48
From sales of flour and bread.....	659 94
From sales of beans and pease	540 39
From sales of candles	421 62
From sales of soap.....	112 10
From sales of salt	44 60
From sales of pepper	23 20

From this, it appears that a little more than one-half (or 504-1000) of the company fund accrues from the sale of pork or bacon, more than a quarter from the sales of coffee, and about 1-14 from sales of sugar.

Sixty-five companies sold more pork or bacon than anything else, and ten more coffee. Of these ten, nine belonged to colored regiments. Every company sold some pork or bacon.

Company II, Eighth Cavalry, sold, during seventeen months, \$660.02 worth of bacon or pork, and Company F, Twenty-fourth Infantry, in the same period, 96 cents' worth. The largest sale of coffee was made by Company C, Tenth Cavalry which received for coffee sold \$348.38, while three companies report no sales of coffee.

Of the below-named articles, maximum sales are reported as follows:

Sugar, by Company K, Eighth Cavalry, in 17 months,	\$187 82
Rice, by Company F, Eighth Cavalry, in 17 months,.....	117 18
Vinegar, by Company F, Eighth Cavalry, in 17 months,	60 64
Flour and bread, by Company A, First Infantry, in 11 months,.....	105 00
Beans and pease, by Company K, Eighth Cavalry, in 17 months,	63 06
Candles, by Company E, Eighth Cavalry, for 17 months,.....	35 58
Soap, by Company K, Eighth Cavalry, for 17 months.....	29 08
Salt, by Company E, Tenth Cavalry, for 12 months,	12 11
Pepper, by Company H, Eighth Cavalry, for 17 months,	3 75

While no sales were made, as follows:

- Of sugar, twenty-one companies report no sales made.
- Of rice, seventeen companies report no sales made.
- Of vinegar, fourteen companies report no sales made.
- Of flour and bread, forty-four companies report no sales made.

Of beans, thirty-two companies report no sales made.

Of candles, twenty companies report no sales made.

Of soap, forty-nine companies report no sales made.

Of salt, forty-seven companies report no sales made.

Of pepper, fifty-nine companies report no sales made.

And here may be mentioned something strange. In very many instances, during the same month, quantities of the same article: flour, bacon, &c., were both bought and sold by the same company, and sometimes to the apparent disadvantage of the fund, that is to say, sometimes more was paid for an article, per pound, than was received for it.

How frequently this purchase and sale of the same thing occurred may be seen by examining the subsequent table of articles of food purchased from the company fund.

The figures in these tables show a surprising difference, in the opinion of company commanders, as to the amount of the different articles of food to be used by their companies, and the amount of surplus to be sold—a difference which an attentive consideration has not enabled me to explain by any principle.

A few interesting facts appear from contrasting the sales, respectively, by white and colored troops, bearing in mind that the white troops greatly exceed in numbers the colored troops, their numbers being, respectively 2,283, and 1,412.

Thus it appears, that this number of colored troops sold nearly as much coffee as the greatly larger number of white troops, while of salt the colored troops sold twice as much.

On the other hand, of pork or bacon, the white troops sold more than twice as much as the blacks; of pepper, more than twice as much; of rice, more than twice as much; of soap, more than three times as much; and of sugar, more than eight times as much.

These facts are valuable as bearing on the question of the suitability of the same ration for the white and colored troops.

TABLE XIX.—Showing the different articles of diet chiefly bought, and the amounts expended therefor, from the company fund of seventy-eight companies, for an average period of about seventeen months.

Articles.	Eighth Cavalry.		Tenth Cavalry.		Second Artillery.		First Infantry.		Twentieth Infantry.		Twenty-second Infantry.		Twenty-fourth Infantry.		Twenty-fifth Infantry.		Total.		
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
Irish potatoes..... bushels..	1,779	\$2,197	836	\$1,126	523	\$649	2,516	\$1,148	1,222	\$1,440	1,021	\$949	537	\$641	369	\$554	8,803	\$8,708	
Fresh meat..... pounds..	40,863	1,595	25,278	969	3,338	177	6,533	413	2,999	140	37	661	4,104	181	16	704	113,753	4,845	
Flour..... pounds..	30,596	1,038	9,906	427	5,448	208	31,20	613	14,955	471	54	794	8,800	288	20	168	96,019	4,011	
Tomatoes in cans..... cans..	4,909	476	1,712	171	2,236	217	31,297	134	2,811	270	38	220	2,171	210	54	122	72,19,467	1,823	
Onions..... bushels..	228	378	98	261	24	51	82	246	12	201	61	112	76	199	54	48	136	26,1,024	1,538
Apples, dried..... pounds..	2,949	358	883	128	425	54	39	118	81	246	24	239	54	117	12	978	146	85,11,404	1,410
Sirup..... gallons..	490	316	212	132	132	73	99	70	79	168	10	234	19	90	99	202	131	65,1,888	1,218
Tea..... pounds..	217	134	403	246	00	61	.....	.....	8	4	93	31	91	463	44	290	180	71,1,692	1,062
Canned goods..... cans..	367	69	1,553	257	00	21	77	20	85	40	71	57	70	164	86	1,186	213	77,5,307	780
Potatoes, sweet..... bushels..	528	358	12	275	44	28	55	.....	38	25	65	7	50	14	75	29	70	86,917	730
Fresh vegetables..... boxes..	.....	131	97	112	70	61	27	79	94	65	62	87	02	80	72	.....	111	50,762	680
Raisins..... pounds..	200	145	29	21	80	69	82	232	98	76	50	96	81	17	38	27	19	50,762	680
Beans..... number..	11,697	317	25	70	2,444	70	96	1,732	44	81	65	72	17	84	45	6	23	898,671	85
Live stock..... pounds..	94	97	86	158	50	8	68	95	73	15	00	62	68	106	89	48	26	70,571	72
Lard..... pounds..	2,105	194	203	15	91	49	83	140	14	109	70	61	23	440	390	32	62,5,833	515	
Yeast powder..... pounds..	380	129	120	42	11	55	04	251	73	95	42	32	49	89	146	50	91,1,502	507	
Corn meal..... pounds..	3,557	71	3,575	68	12	40	59	3,260	39	49	95	69	09	1,377	3,474	84	18,23,911	458	
Condensed milk..... cans..	629	106	107	17	78	9	67	102	86	73	02	76	01	69	121	21	07,2,370	418	
Spices.....	.....	62	77	30	09	12	43	29	07	54	17	86	14	.....	.....	17	83,313	80	
Bacon or pork..... pounds..	555	34	25	17	51	2	50	75	48	6	52	157	37	8	25	8	18,5,543	310	
Extracts of lemon and vanilla..... bottles..	411	64	51	41	60	27	49	46	76	35	32	17	21	20	90	124	21	32,275	11
Sugar..... pounds..	341	26	69	52	70	5	20	72	80	3	35	23	78	29	55	718	57	82,271	89
Butter..... pounds..	55	17	79	57	88	11	25	24	68	9	85	41	27	28	39	126	44	97,235	98
Pickles..... gallons..	69	33	24	113	73	1	49	14	25	2	80	8	24	17	94	108	57	28,248	98
Ham..... pounds..	78	8	03	21	70	8	26	6	26	10	01	31	83	86	25	254	27	31,149	65
Eggs..... dozen..	39	10	92	13	40	10	85	81	75	10	92	10	23	21	26	73	18	90,127	23
Lamp oil..... gallons..	4	2	68	22	42	15	62	.....	.....	46	09	.....	.....	33	07	9	5	25,125	13
Sauer kraut..... pounds..	104	5	96	15	70	.....	.....	48	00	6	65	16	95	.....	.....	44	7	52,104	05
Fresh milk..... quarts..	175	11	87	41	04	1	20	5	30	8	69	17	59	3	25	94	15	35,96	26
Alcoholic drinks.....	.....	4	00	89	45	.....	.....	19	45	2	25	7	50	19	86	.....	5	00,97	51
Ten per cent.....	.....	821	59	166	06	84	52	163	19	121	51	120	20	154	87	.....	133	08,1,265	02

The foregoing is a tabular statement of the principal expenditures from the company funds of seventy-eight companies for an average of about seventeen months, or the period embraced in the first nine tables. In this statement appears the 10 per cent. paid to the Subsistence Department for transportation, &c. The heading "fresh vegetables" includes many kinds of vegetables not very definitely reported in the company fund statement. Thus an item appears: a load of vegetables, so much; lot of turnips and cabbages, so much; or lot of pumpkins. It thus includes all other vegetables than those especially named under some other heading. Under the head of spices is included a variety, viz: cayenne and black pepper, chile, cinnamon, cloves, ginger, mace, mustard, nutmeg, Worcestershire sauce, and allspice. Lamp oil and candles are also included in this statement because they have been procured from the Subsistence Department with the other components of the soldier's ration, of which candles form a part, by law.

Live stock includes hogs, sheep, turkeys, and chickens, probably alive when purchased, though some may have been dead, the reports simply calling them hogs, sheep, turkeys, chickens. Fresh meat includes beef and all varieties of fresh meat reported as purchased.

The largest expenditure for any one article was for Irish potatoes. For these the sum of \$8,708.23 was paid for 8,803 bushels. Every company, without any exception, purchased some Irish potatoes; the largest amount paid therefor by any one company being \$259.96 by Company H, Eighth Cavalry, for 204 bushels, and the smallest amount by Company I, Tenth Cavalry, for 45 bushels. In consequence of the very different price of potatoes at different places, however, the greatest expenditure of money did not always procure the most potatoes. Thus, Company A, First Infantry, purchased more than 600 bushels for \$243.90, or three times as much as Company H, Eighth Cavalry, for more money.

Of the seventy-eight companies whose expenditures are reported, sixty-one spent more for Irish potatoes than for any other one article of food.

Fresh meat comes next to potatoes in money value, and for this the expenditure is reported \$4,845.50 for 113,753 pounds; eight companies report no purchases thereof. Company H, Eighth Cavalry, bought 11,236 pounds of fresh meat, paying therefor \$445.10, which was the maximum of beef purchased, and the maximum amount paid therefor by any one company. Twelve companies spent more in fresh meat than in any other article.

Next to fresh meat, in the amount expended therefor, comes flour, of which 116,019 pounds were bought, at a cost of \$4,011.22. Three companies report no flour purchased, and but five companies report more spent for flour than any other article.

Company G, Eighth Cavalry, purchased more flour than any other company, viz, 6,168 pounds, with, also, the greatest expenditure, \$194.95.

Canned tomatoes rank next to flour in importance, as shown by this statement: 19,467 cans of tomatoes were purchased at a cost of \$1,823.26. Only one company failed to buy tomatoes, and Company G, Eighth Cavalry, bought the maximum amount, 972 cans, at a cost of \$91.34. The price of tomatoes varied but little. More money was spent for tomatoes than for all other canned goods combined, and more than twice as much as for all canned goods, excluding condensed milk, for which the expenditure was not one-quarter of that for tomatoes. It is a fair conclusion, from these figures, that the tomato, in cans, is the most suitable canned vegetable for the use of the soldier on the frontier.

After canned tomatoes, in importance, comes the onion; \$1,588.95 was expended for 1,024 bushels; five companies purchased none, and the largest purchaser was Company M, Tenth Cavalry, which bought 1,474 pounds for \$80.53.

In cost, dried apples follow the onion; 11,404 pounds of dried apples were bought for \$1,410.77. Every company but seven bought this fruit, and Company K, Eighth Cavalry, bought 962 pounds at a cost of \$138.26.

After dried apples comes sirup (including molasses). For sirup, \$1,218.53 was expended, which procured 1,888 gallons. Twelve companies found the purchase of this article unnecessary, while Company K, Eighth Cavalry, bought 223 gallons for \$139.06.

And here follows tea, of which 1,692 pounds were purchased for \$1,062.42. Forty-one companies, or more than half, bought no tea, and one whole regiment reports no purchases. Company C, Tenth Cavalry, was the largest purchaser of tea, of which it bought 187 pounds for \$115.59. Three colored regiments, or thirty-two companies, bought more than four-fifths of the tea, while forty-six white companies bought less than one-fifth. Relatively, the colored troops sold more coffee than the whites, but not in anything like the same proportion as the difference in the purchase of tea.

I have included under the next head all canned goods used, save tomatoes and milk. Of these, 5,307 cans were bought, costing \$846.03, and of this a little over one-third was paid for canned corn. For corn, pease, and beans, \$364.16 was expended. For the fruits, including apples, peaches, pineapples, plums, pears, cranberries, blackberries, jams, and jellies, \$325.01 was expended, while for canned beef, tongue, deviled ham, oysters, clams, salmon, mackerel, lobsters, sardines, and soup, \$156.86 was

expended. Fifteen companies, only, failed to indulge in some of the articles under this heading, while Company L, Tenth Cavalry, purchased thereof to the amount of \$50.81. Only two companies bought sardines, and each made but one purchase.

Sweet potatoes come next in order, for 917 bushels of which \$780.87 was paid. Company K, Eighth Cavalry, was the largest purchaser, and to the amount of \$107.07 for 170 bushels. Forty-five companies bought no sweet potatoes.

Next come fresh vegetables, as above described. For these \$830.83 was paid. Company A, Twentieth Infantry, paid \$53.25 therefor, and nineteen companies bought none.

Raisins rank next after vegetables. Of these, 792 boxes were bought at a cost of \$620.28. The number of pounds of raisins bought is uncertain, as one-fourth, one-half, and whole boxes were bought, but all alike called *boxes* in the reports. Raisins were very generally bought, every company, save twelve, using them, and Company H, Twenty-second Infantry, buying to the extent of \$40.80.

Twenty-three thousand eight hundred and ninety-eight pounds of beans were bought at an expense of \$671.85. Nearly half of this amount was bought by the Eighth Cavalry. The Tenth Cavalry and Twenty-fifth Infantry, colored, bought scarcely any. Company F, Eighth Cavalry, was the largest purchaser—to the amount of \$72.36. Thirty-one companies bought no beans.

Live stock comes next, in expense, to beans (at least I suppose them to have been alive when bought, from their mode of entry on the reports). They cost \$571.72, and embrace 98 hogs, 39 sheep, and 62 turkeys and chickens. Thirty companies spent no money in this way. Company B, Tenth Cavalry, paid the largest amount of any one company, viz, \$46 for 23 sheep.

Lard comes next, in amount, to live stock, and of this, \$515.87 purchased 5,333 pounds. Nine companies found the purchase of lard unnecessary, and Company I, Eighth Cavalry, required it to the amount of \$57.12.

After lard comes yeast powder. No less than 1,502 pounds of yeast powder were purchased, at a cost of \$507.98. Nine companies bought none of this, and the largest expenditure therefor, by any one company, was by Battery F, Second Artillery, which paid \$29.07.

Corn meal was purchased to the amount of \$458.87, for which 23,911 pounds were obtained. Twenty-seven companies bought no meal, and Company E, Twenty-fifth Infantry, bought 1,120 pounds at a cost of \$25.45.

Two thousand three hundred and seventy cans of condensed milk were bought at a cost of \$418.35. Fifteen companies bought no condensed milk, and of these fifteen, two, only, bought any fresh milk; Company G, Tenth Cavalry, which bought no condensed milk, being the largest purchaser of fresh milk. Company F, First Infantry, was the largest purchaser of canned milk. It bought 177 cans for \$35.60.

And here must be put spices, as heretofore defined; \$313.80 was paid out for these, and every company but two needed them. Company G, Eighth Cavalry, purchased them to the amount of \$21.58.

Bacon and pork were bought to the extent of \$310.06. Fifty companies did not buy, while Company B, Twenty-second Infantry, bought 1,048 pounds at a cost of \$58.93. This same company reports the sale of \$204 worth of bacon and pork. Only six out of thirty-two colored companies bought bacon or pork.

Next in value to bacon bought come the flavoring extracts, viz, extract of lemon and extract of vanilla. These were bought to the extent of \$275.11, which amount was paid for 1,535 bottles of lemon and 190 bottles of vanilla. Six companies bought none of these, and Company E, Tenth Cavalry, required them to the amount of \$15.74. For these extracts, and for spices, the sum of \$588.91 was expended. Certainly, the soldier did not eat his ration unflavored. If he was hungry his appetite was not untempted.

Sugar was purchased, next, in money value, to flavoring extracts. Two hundred and seventy-one dollars and eighty-nine cents bought 3,250 pounds. Twenty-three companies bought no sugar. Company G, First Infantry, bought 334 pounds for \$27.56. This company sold no sugar.

After sugar come pickles. Thirty-six companies bought no pickles, and of these thirty-six companies, twenty-nine were white troops. Four hundred and eighty gallons were bought at a cost of \$248.88. Company M, Tenth Cavalry, purchased 72 gallons for \$39.20. The colored troops bought more than two-thirds of all bought.

Butter was purchased to the extent of \$235.98, which procured 779 pounds. Company G, Twenty-second Infantry, was the largest purchaser of butter, and purchased 160 pounds at an expense of \$22.52. Thirty-four companies bought no butter.

Ham comes next in order, of which 1,464 pounds were bought, costing \$149.65. Forty-six companies failed to buy ham, and \$21.80 was the highest amount paid by any one company, which amount was paid by Company G, Twenty-second Infantry, for 223 pounds.

Eggs were purchased to the amount of \$127.23, which procured 531 dozen eggs. Forty companies bought no eggs, and \$16.35 was the highest amount paid for eggs by any company; this bought 59 dozen for Company G, First Infantry.

Two hundred and one gallons lamp oil were bought for \$125.13 by sixteen companies. Forty-five dollars and three cents was paid for 65 gallons of oil by Company B, Twentieth Infantry. Of the sixty-two companies buying no oil, seventeen bought small quantities of candles, for which \$21.85 was paid, and 139 pounds bought by eighteen companies. Sixty-one companies bought neither oil nor candles.

Sauer kraut was bought to the extent of 1,963 pounds, costing \$104.05, and by thirteen companies. Company F, First Infantry, paid \$48 for 950 pounds.

Fresh milk was bought to the extent of only 233 gallons, costing \$96.26. As appears before, more than four times as much was paid for condensed milk. Judging from all the circumstances of time and place, the reason of this does not seem to be that condensed milk was preferred to fresh milk, but that the latter could not be procured. Only nineteen companies bought fresh milk, and 50 gallons, for \$15.15, was the highest amount purchased by any company, and this by Company C, Twenty-fifth Infantry.

Alcoholic drinks, including brandy, whisky, wine, and beer, were purchased to the amount of \$97.51, and by twenty companies.

The ten per cent. paid by the company funds to the Subsistence Department for transportation, &c., in pursuance of a law of Congress, amounts to the sum of \$1,265.02 at least, probably more.

Other articles of food, or ration, purchased hardly deserve any special mention. A list of these comprises rice, macaroni, coffee, fresh apples, apple butter, barley, arrow-root, candles, candy, cheese, chocolate, citron, codfish, citric acid, coffee essence, corn starch, crackers, cracked wheat, fresh cranberries, currants, farina, fish, garden seeds, gelatine, grits, herbs, herring, hominy, hops, ice, lemons, mackerel, malt, mince meat, nuts, oat meal, olive oil, oranges, fresh oysters, oxalic acid, peloncillos, pies, prunes, sage, salt, soap—Castile and other,—suet, tapioca, thyme, saltpetre, soda, baking powder, cream of tartar, and vinegar, and expressage on various of the above articles.

Of these, garden seed was bought to the largest extent, \$114.92. For rice, \$90.10 was paid, and for macaroni as high as \$70. Only 6 pounds of rice was bought by colored troops, at a cost of 53 cents. For coffee, \$42.92 was paid, and salt was bought to the amount of \$8.31. Soap, a part of the ration, but not eaten, was bought to the extent of \$16.85, and candles to \$21.85.

Thirty-four thousand eight hundred and thirty-seven dollars and five cents are thus accounted for, which, subtracted from \$36,101.36, the amount shown in table IX to have been paid for articles of food, leaves \$1,264.31. This amount must be divided among the 50 above-named articles, the amount and prices of which are not embraced in the above table.

It is well to remark, in connection with the recommendation that cheese be made a portion of the ration, that during seventeen months, in this whole department, the sale of less than 100 pounds of cheese is reported by the company commanders.

As great contrasts exist in the purchases, as in the sales, of the white and colored troops.

As all the companies made report of these purchases, the reports are from 2,283 white troops, and 1,541 colored, or about 3-5 white, to 2-5 colored.

Now, these 1,541 colored troops bought the following articles in much greater quantities than the 2,283 white troops:

Tea, more than five times as much; canned goods, other than tomatoes and milk, three times as much; butter, about 1-5 more; sugar, about 1-14 more; live stock, about 1-20 more; pickles, more than three times as much; ham, about 1-4 more; milk, fresh, about 1-3 more; alcoholic liquors, nearly twice as much; soap, nearly four times as much. They also bought decidedly more than 2-5 of lamp oil, fresh vegetables, and sweet potatoes.

Of the following-named articles they bought very much less than their proportion. Of the whole amount bought, they purchased as follows:

Irish potatoes, not much more than 1-4; flour, not much more than 1-5; tomatoes, canned, less than 1-3; apples, dried, less than 1-3; sirup, less than 1-3; raisins, a little more than 1-12; beans, a little more than 1-8; lard, about 1-6; yeast powder, about 1-4; milk, canned, not quite 1-8; bacon, or pork, not quite 1-9; extracts of lemon and vanilla, not quite 1-3; spices, a little more than 1-5; rice, but a very small fraction; sauer kraut, about 1-4; candles, about 1-10; salt, about 1-8.

These differences, in the proportion of articles of food bought and sold by the white and colored troops, respectively, would seem to indicate the propriety of a ration somewhat differing for the two.

XX.—Table showing the difference in value between the bread issued to the soldier and the flour allowed him by law. This difference is euphoniously called “the bakehouse savings.”

Posts.	Period embraced in report.	Average number of men to whom rations were issued.	Total savings.	Average savings per man per day.
Fort Brown.....	517 days ..	398	\$2, 117 00	1. 02913
Fort Clark.....	517 days ..	648	1, 996 88	0. 58805
Fort Concho.....	517 days ..	258	1, 272 65	0. 95411
Fort Davis.....	517 days ..	179	1, 460 30	1. 37797
Fort Duncan.....	517 days ..	212	649 30	0. 58249
Fort Griffin.....	547 days ..	47	247 03	0. 98697
Fort McIntosh.....	517 days ..	186	771 72	0. 80252
Fort McKavett.....	517 days ..	254	1, 258 00	0. 95244
Fort Ringgold.....	517 days ..	253	1, 446 46	1. 10585
San Felipe.....	458 days ..	80	357 75	0. 97639
Fort Stockton.....	517 days ..	167	1, 387 14	1. 60002

Preceding are found, consolidated in table XX, the reports representing the money value of the loss of food to the soldier, resulting from the issue of bread instead of flour.

The posts of Corpus Christi, Peña Colorado, and San Antonio report no bakehouse and furnish no data.

A report, for seven months only, was sent from post of San Diego, but is valueless in this connection on account of its indefiniteness. The commanding officer reports: “I can find no data for the months beyond November, 1879, as the post treasurer’s book is defective, neither does it show the exact amount of flour turned in to the bakery, or the exact amount of bread that has been baked and issued.”

The table furnishes reliable information from the other eleven posts of the department.

From this table it appears that the gain of the post fund, *which is the loss to the soldier* of so much food, varies but a small fraction of a cent (less than $\frac{1}{3}$ of a mill) from 1 cent per day for every man.

These are actual results, which could be much improved under favorable circumstances and the best management—even in this report, at forts Davis and Stockton, this saving on flour, as it is called, has ranged higher than $1\frac{1}{2}$ cents per day per man.

In 1874, some experiments were made at Fort Monroe, Va., to determine the absolute saving at that post for several bakings.

These experiments were made at my request at the post bakehouse, under the joint direction of Lieutenant Curry, Fifth Artillery, A. C. S., and myself. In them, the average amount of flour used for baking was 318 pounds, the minimum and maximum being, respectively, 316 and 321 pounds. From this flour the average amount of bread obtained was 489 pounds, the minimum and maximum being, respectively, 483 and 499 pounds.

In each baking there was added to the flour 5 pounds of salt, 10 gallons of water, and from $14\frac{1}{2}$ to 15 gallons of ferment, which ferment was made up of 17 pounds of potatoes and 2 or 3 pounds of the flour, the remainder being hop yeast diluted with water.

The bread was weighed when just cool, or after standing upwards of an hour. In every case the bread was good.

In a letter on this subject received from Major Cushing, of the Subsistence Department, he says: “At large bakeries, of which I have had charge, I have made savings of from 30 to 35 per cent., but at small bakeries I could not much exceed 27 or 28 per cent.”

The General Regulations of the Army, for 1821, says that a barrel, or 196 pounds, of flour will yield about 265 pounds of stale bread.

The Baker’s London Gazette, of 1849, gives 72 pounds of good, sound, well-baked bread as the yield from 56 pounds of fine flour, from good wheat.

Ure’s Dictionary states that bread, made of good flour, is about 5–16 heavier than the quantity of flour which it contains.

The Army Regulations now in force give the saving on the flour ration as, ordinarily, 33 per cent. by baking the soldier’s bread at a post bakery.

From all the foregoing, it appears that if the flour allowed by law to the soldier was all issued to him as bread, he would receive at least one-third more than he now

receives. One-third of 18 ounces per day is 6 ounces, or a greater amount than the increase advocated by General Stanley and others.

As this, however, is contingent on proper management, the argument of this paper may rest on the results above reported as attained in this department, viz, that each soldier loses about 1 cent per day in flour; which amount is mainly turned over to what is called the post fund, and used for other purposes than feeding the soldier.

If only enough flour was taken from the ration to pay for baking, I should still maintain that even this was unjust to the soldier, as not being in harmony with the intent of the law fixing his ration; but when, besides this expense, a part of the soldier's food is taken to pay for a variety of objects, I can but regard it as still more objectionable.

The first ration of our Army of which I have been able to find an account is contained in the American Archives for 1776, 5th series, vol. 1, page 865. This mentions bread and flour as equivalent terms of the ration. Doubtless their difference, in nutritive value, was not as much appreciated then as now.

Since then the words occur in the same juxtaposition in every law establishing the ration to which I have had access. I have often thought that this occurred from imitation, or inconsiderately.

In the Revised Army Regulations for 1863 (being the edition of 1861, published in 1863), first appears, incorporated in clause 1190, the following:

“The Subsistence Department, as may be most convenient and least expensive to it, and according to the condition and amount of its supplies, shall determine whether soft bread, or flour, and what other component parts of the rations, as equivalents, shall be issued.”

In consequence of the use of the words “most convenient and least expensive,” as used in the first clause of the foregoing regulation, it is not quite clear whether the word “equivalents,” in the last clause, refers to money value or nutritive value. In either case, the whole regulation seems to be objectionable, because introducing an element of unnecessary uncertainty into what, to the soldier, should be certain, viz, his ration.

However, whether objectionable or not, no just interpretation can so construe the law or regulation as to direct the *constant* issue, when there are alternative articles of food, of that one which has the least value, viz, the bread.

Yet not only is this done, wherever possible to issue bread, but General Orders No. 24, A. G. O., of 1878, contains the following clause: “27. The baking of bread by companies at posts, in order that the saving may ensue to the benefit of the company fund, is expressly forbidden.”

I have never heard but one excuse given for this misuse of the flour; and this is an excuse, it is not a reason.

It is said: It is desirable that the soldier's flour should be well baked for him; and garden seeds and utensils, post schools, libraries, and reading rooms, gymnasia, chapels, trees and bushes, printing press, and bands of music, are to the advantage of the soldier. Granted; but why should the flour pay for these? It is replied: This use of the flour is the most convenient mode of providing these articles. This answer does not touch the equities of the case—the rights of the soldier.

Even if such use of flour was more than convenient, when the flour is superabundant, can it be justified, when so many officers express the opinion that the soldier is suffering from want of food, and particularly of flour?

If it is justifiable to mulct the ration of flour to pay the expenses of its cooking, it is equally justifiable to mulct the beef and coffee to pay the expenses of the kitchen in which they are cooked, or to mulct the soldier's allowance of clothing to pay the expense of its preparation. I have never heard it claimed that the latter propositions were justifiable.

Any discussion of the flour ration would be incomplete which failed to refer to the kind of flour used.

That habitually issued is a fine, thoroughly bolted flour. Now, it has been long maintained that in the so-called best grades of flour a large part of the nutritive material of the wheat was lost, and that a very important portion, viz, the skeleton producing. Of this view, at present only this much is certain, that it has great plausibility; and the issue of the wheat meal to a certain portion of the army is an experiment well worth trying.

To resume, company fund transactions represent a barter of surplus rations, other than flour, for articles deemed desirable for his company by its commander.

In seventy-eight companies, for about seventeen months, these amounted, in this department, to the sum of about \$39,000 (received from sales, &c., \$39,141.56; expended, \$39,226), or, in round numbers, \$29.50 for each company, per month.

Of this amount, \$3,124.64 were expended for other articles than food.

It further appears that there was paid out of this amount at least \$1,265.02 in the shape of ten per cent. on all articles bought from the Subsistence Department.

By law, this tax is now done away with, and hereafter this amount will be available to buy other food.

Still further, it appears that there was lost to the soldier, of flour, by the issue of bread instead of flour, the sum of \$12,965.52.

It further appears, that there remained in the hands of company commanders the sum of \$5,983, available for the purchase of food for the soldier, if, in the opinion of his company commander, he requires it.

Thus, in addition to the amount of food the soldier did receive, he might, with the existing ration, have received the following amounts, had the whole money value of his ration been allowed him:

Company fund, expended for other articles than food.....	\$3,124 64
Loss on flour	12,965 52
Amount of company fund in hands of company commanders	5,983 00
	<hr/>
	22,073 16
To this may be added the amount of the ten per cent. tax, which, no longer required, was only levied for one year.....	1,265 02
	<hr/>
Total	23,338 18

The average number of men belonging to the companies embraced in these reports was 3,824.* The average price of flour, for issue to soldiers, in this department, for the period embraced in this report, has been \$38.69 per thousand pounds. And the average price of beef for the same period was \$5.35 per hundred pounds.

The roster of troops in this department shows that during the period embraced in this report, 2-13 of these troops, on duty in this department, were in the field; and, as the troops in this department have been employed as actively as any others, it is fair to allow the same proportion of field duty to the small moiety who served out of this department. Two-thirteenths of 3,824 equals 588.

The records of the office of the chief quartermaster of the department show the number of soldiers employed by the Quartermaster's Department as laborers, mechanics, teamsters, artificers, &c., to have averaged 220. The number of men on fatigue duties, other than those above specified, I am unable to ascertain.

General Stanley, in making a class to include "men in the field, or when employed as laborers in the Quartermaster's Department, or upon fatigue duties, whether for one day or a longer period," doubtless intended to designate the men who led a more active life, or performed harder labor than was usual to the garrison life of a soldier. Many of the men reported as in the field were not living an unusually active life, or performing exceptionally hard work, but were quietly living for many days at a time,—and many men embraced in the list of employes of the Quartermaster's Department, such as storekeepers, overseers, telegraph operators, overseers of schools, foragemasters, and teamsters, were not performing unusually hard work. These may be placed as a set-off to the men on fatigue duty, whose number I have no report of. This will leave the number of men for whom an extra issue is recommended by General Stanley:

In the field	588
In Quartermaster's Department	220
	<hr/>
Total	808

Eight hundred and eight men for five hundred and seventeen days, would require four hundred and seventeen thousand seven hundred and thirty-six rations.

This number of quarter pounds of flour, and half pounds of meat, at the prices before given, would cost as follows:

Flour	\$4,040 55
Beef	11,174 43
	<hr/>
Total	15,214 98

That is to say, if these soldiers had received their whole ration, or the money value thereof, in the shape of food, all troops in the field in this department, for seventeen months, could have received, from the amount above calculated, \$23,338.18, the extra issue of flour, and beef, or bacon, recommended and considered sufficient by General Stanley and others, and have still available, for the purchase of food, \$8,123.20.

The average price of the bacon or pork bought in this department by the troops

* NOTE.—During the whole time embraced in this report, one-fourth of the Tenth Cavalry were on duty in the Department of the Missouri. During January, February, and March, 1879, the Twenty-second Infantry were on duty in Dakota, and for the last nine months of 1879 four companies of this regiment were absent from the department, in Dakota, the remainder being in this department.

For the whole of the time the First Infantry were in the Department of Dakota, and no returns of their strength for that time are at these headquarters. Assuming that their strength was the same as that of the other infantry regiments, the average number of enlisted men belonging to the companies embraced in this report was about 3,824.

was \$55.93 per thousand pounds, so that the increased 4 ounces of bacon or pork recommended would cost less than the 8 ounces of beef. If their bacon or pork were issued two days in the week, as 2-7 of 417,736 is 119,353, that number of rations of bacon would have been issued instead of the same number of beef. The cost of this number of $\frac{1}{4}$ pounds of bacon, at above price, would have been \$1,668.83. The cost of this number of $\frac{1}{4}$ pounds of beef, at above price, would have been \$3,192.65.

If, then, bacon had been issued two days in the week, and beef five days, the difference between the last named-sums, or \$1,523.82, should be added to the amount on hand, \$8,123.20, making \$9,647.42.

Again, this amount of money, \$23,338.18, would have supplied all the troops in the department with an increased ration of flour of 4 ounces per man.

The number of men (3,824 x 517), multiplied by the number of days embraced in the seventeen months of the report = 1,977,008, the number of rations issued. This, multiplied by the price of 4 ounces of flour, would give \$19,122.60, the cost of 4 ounces of flour daily to each man, and still leave \$4,215.58 for other food.

The facts and figures brought into the foregoing calculation are not the only ones tending to the same conclusion.

On considering the whole scheme of disbursement of the company fund, it would scarcely strike the examiner that the men thus fed were suffering from deficiency of food. Thus, can it be thought that company commanders seriously believed their command to be suffering from want of nutriment, and yet would expend over \$1,400 for dried apples, near \$1,200 in sirup, more than \$1,000 in tea, more than \$300 in sweetmeats, nearly \$700 in raisins, over \$300 in spices, nearly \$300 in flavoring extracts, nearly \$100 in alcoholic drinks, many hundred dollars in the different articles before named, which are rather articles of luxury than necessary food, and more than three thousand dollars for such a variety of articles that can in no sense be considered as food?

I do not wish to be considered as objecting to any of the articles named immediately above, as proper additions to the soldier's diet; but it seems scarcely possible that these articles could have been so largely purchased when the men for whom bought were suffering from insufficiency of bread, meat, and potatoes, the staple articles of food.

One thing further, which seems not to have attracted the attention of those advocating the necessity of an increased ration.

Suppose that the ration is increased by the addition of flour, 4 ounces, and beef, 8 ounces.

Unless the whole system of administration is changed, the bakehouse saving will still go to the post fund, and inasmuch as the food allowed by law is not all now received as nutriment by the soldier, what security is there that the increase of ration, both beef and flour, may not be diverted in similar directions?

His only security will be in a change of the present system of administering the ration, and if this system is now changed, so as to give the soldier all his ration, or the products of its barter, for food, there is good reason to believe that the desired result may be thus achieved; for I submit, that the foregoing facts and figures all tend to prove that the fault, from which the soldier now suffers, is not the insufficiency, but the maladministration of the soldier's ration.

If it be considered that the quantity of food allowed the soldier is sufficient, the question still occurs, can the ration, as now composed, be advantageously modified? This may be answered in the interest of the soldier, and of the government, so far as their interests can be considered as not identical.

Neither habitually nor voluntarily does the soldier consume his food in the proportion, or anything like the proportion, constituting his legal ration—witness the large sales recorded in tables X-XVIII, particularly of pork or bacon, coffee, sugar, and rice.

Witness, further, the large purchases recorded in table XIX, particularly of potatoes, fresh meat, and flour.

But as, on the other hand, the soldier has been able to obtain these desired modifications under the present system of transfer, denominated the company fund, the question whether it is best to continue this system, or whether it is best for the government to supply these articles of food in kind, is one the answer to which must depend on several considerations, the chief of which are first cost in market, and facility of transportation. On these points, I have not the information on which to decide. Such limited data on the subject as I have been able to acquire, leads me toward the conclusion that in time of peace, and in garrison, a ration modified so as to give the soldier a greater variety of food, may be issued by the government without any greater expense, and with but little additional labor.

I have not deemed it advisable to complicate this account of the company fund by the detailed consideration of the hospital fund, and this because: firstly, after considerable inquiry, I find no officer who thinks that patients in hospital are not abundantly fed; and secondly, a partial analysis of the expenditures from the hospital fund is to

be found in the report on the hygiene of the United States Army, issued by the Surgeon-General in 1875.

After many years' experience in managing a hospital fund, in post hospitals before 1861, in a large general hospital during the war of the rebellion, and in post hospitals since, I can affirm that I have never found difficulty in feeding, properly, the sick in hospital. A few facts it will be well to state: The hospital fund in this department, for the seventeen months embraced in the first tables, has amounted to over \$4,500, of which not far from one-seventh has been expended for other articles than food, and about \$640 remained on hand at the end of the period.

It is very evident that here is another means of diverting the soldier's ration from its legitimate end of feeding the soldier, and the introduction of these figures into the tables would have strengthened my conclusions.

This, also, may be said of any probable inaccuracies in the statements of the company fund, as received from the company commander: If there are any instances in which an error has crept into the company fund reports, as to the articles charged; if, instead of a charge of five dollars for fuel, or blacking, or music, or repairs, or what not, appears the charge of \$5 for flour, it only would show so much the more of the soldier's ration lost to him as food, and add additional force to the argument of this paper. The same may be said of any other shortcoming in these reports. I know of no error that would have concealed, or made to have appear less, the amount of food actually issued to the soldier. In other words, every error would tend to make the amount of food received by the soldier appear greater than that he really did receive.

The foregoing figures and remarks, taken in connection with the letters of General Stanley and Captain Poole, naturally lead to the following recommendations, which I respectfully submit:

1st. That existing regulations and orders be so modified that the soldier may receive the whole of his authorized ration of *flour*, either in the shape of flour or bread.

2d. That the soldier receive the whole of his ration, or the product of its barter, in the shape of food.

3d. That such modifications be made in the components of the soldier's ration, as may be determined upon as best for the soldier—these modifications not to change the present cost price of the ration.

The principal of these modifications would probably be the reduction of the amounts issued of pork and bacon, sugar and coffee; the substitution therefor of other articles of diet, and, perhaps, the adoption of slightly different rations for the white and colored troops, to meet their tastes.

It is probable that all this could be accomplished without additional legislation.

Section 8, of the act approved April 14, 1818, gives the President power to "make such alterations in the component parts of the ration as a due regard to the health and comfort of the Army and economy may require." This clause has, to the best of my belief, never been repealed, and the power has before been exercised.

As the adoption of the foregoing recommendations would necessitate the meeting of the bakehouse expenses from some other source, an additional clause might be required in the annual appropriation bill, granting an allowance of fuel to the bakehouse, and extra pay to the baker.

It can scarcely be doubted that Congress would grant the above, if it were properly represented to them—

1st. That the law grants the soldier a certain ration.

2d. That he does not get it.

3d. That in consequence thereof, in the opinion of some of the best and most intelligent and experienced officers in the service, the soldier, in the field or on fatigue duty, is, to use the language of General Stanley, "constantly hungry."

I hope that this matter may be pressed by the department commander, and that company commanders, and the soldiers themselves, may take it up, in the shape of petitions to the War Department, and Congress.

Very respectfully, your obedient servant,

JOS. R. SMITH,
Surgeon United States Army, Medical Director Dept. of Texas.

[First indorsement.]

HEADQUARTERS DEPARTMENT OF TEXAS,
San Antonio, Texas, December 5, 1880.

Respectfully referred to the chief commissary of subsistence, of the department, for remark.

By command of Brigadier-General Ord:

THOMAS M. VINCENT,
Assistant Adjutant-General.

[Second indorsement.]

HEADQUARTERS DEPARTMENT OF TEXAS,
OFFICE CHIEF COMMISSARY OF SUBSISTENCE,
San Antonio, Texas, December 6, 1880.

SIR: In compliance with indorsement from your office, dated December 5, 1880, I have the honor to return, herewith, the report of the medical director, Department of Texas, dated November 3, 1880, with the following remarks:

I fully concur with the summing up of the medical director of this department; that the entire quantity of food authorized by law as the ration of the soldier should be given to him in kind, or in some other proper food, and no portion of it diverted either in the way of post or company fund.

It is probable that a slight increase to the meat and bread portions—decreasing, slightly, the coffee and sugar portions—could be made to the improvement of the ration as now supplied to the Army; it should, however, be a principle established by regulations, that whatever the government allows as a ration must, if sold, be replaced by its equivalent, in *food*, to the soldier.

Very respectfully, your obedient servant,

C. B. PENROSE,

Captain and Commissary of Subsistence, Chief Com. of Subsistence.

To the ASSISTANT ADJUTANT-GENERAL,
Department of Texas, San Antonio, Tex.

[Third indorsement.]

HEADQUARTERS DEPARTMENT OF TEXAS,
San Antonio, Texas, December 6, 1880.

Respectfully forwarded, through Headquarters Military Division of the Missouri.

The medical director's exhaustive examination of the administration of the company fund shows that, where that fund is judiciously managed, the ration is satisfactory, in quantity and variety, for troops in garrison. The concurrent testimony of nearly all the officers whose views are referred to, is, that for troops in the field, or engaged at hard labor, the ration is insufficient. A change in our system so as to give the soldier the full ration, or its equivalent, in food, would afford relief to some extent.

The Subsistence Department holds that the ration, when once issued, ceases to be the property of the United States; meaning, it is presumed, that when once issued the ration cannot be legally withheld or taken from the soldier. This view is supported by section 1294, Revised Statutes, wherein it is provided that "for each ration of coffee and sugar not issued, nor commuted for the extract of coffee, combined with milk and sugar, enlisted men shall be paid in money." The cost of converting flour into bread, not being otherwise provided for, is deducted; but the soldier should get the remainder in the form of food.

The appropriation of money, derived from the sale of any part of the *soldier's* ration, to other purposes than providing food in greater variety, is, in my opinion, contrary to law.

If there are, as there seem to be, good reasons for believing that the ration is only enough when the men are comfortably quartered and performing garrison duty, it will, as a matter of course, be insufficient when they are undergoing great fatigue and exposure, without the time or adequate means for properly preparing and economizing their full allowance of food; and I think the fact that men, under different circumstances, require an increased or diminished allowance of food, should be recognized and provided for. The authority to make such provision is, I believe, conferred upon the President by the statutes, and has been exercised by him, although the component parts of the ration were specified by law.

E. O. C. ORD,

Brigadier General, United States Army, Commanding.

[Fourth indorsement.]

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, June 1, 1881.

Respectfully returned to the Hon. Secretary of War, with remark that I concur fully in both the first and second recommendations within of Surgeon Smith, viz: 1st, "That existing regulations and orders be so modified that the soldier may receive the whole of his authorized ration of *flour*, either in the shape of flour or bread; and, 2d, that the soldier receive the whole of his ration, or the product of its barter, in the shape of food."

In reference to his third recommendation, however, I am not convinced that any modification in the components of the ration (without changing present cost price of the ration) are necessary or advisable, or would be of benefit to the soldier or advantage to the service.

If any article of the ration were unnecessary, or unimportant, or not desired, it would be advisable, no doubt, to substitute for it some other article more desirable and more important as food; but the articles of the ration were selected after mature consideration, and a long trial in all sorts of service in peace and war has proved their value and necessity, and has also shown that at times the entire ration is consumed, while at other times savings are made, not from one or two articles only, but at different times from every article of the ration. It would evidently be wholly impracticable to fix upon such a ration as would always be satisfactory, and no change for other articles of food be necessary or desired. If, however, the ration is ample; if every component thereof is a necessary article; and if on campaign or other hard service it is all consumed, and in garrison or camp savings are allowed to be sold and the proceeds expended for other articles of food, so as to afford the soldier a greater variety than any established ration could possibly permit, there is apparently little more to be desired in the Army rations.

In my opinion no part of the savings from the ration should go to the *post fund*, but all to the company fund; that no part of the savings should, *as now allowed*, be expended for post schools, post libraries, gymnasiums, chapels, or for any purpose or articles whatever other than articles of food.

I fully concur with General Ord in the opinion expressed by him in his indorsement herein of December 6, 1880, that "the appropriation of money derived from the sales of any part of the *soldier's* ration to other purposes than providing food in greater variety is contrary to law."

Under existing orders and regulations savings from the ration may be sold either to the Subsistence Department or to parties outside, and with the proceeds purchases of other articles can be made either from local producers and dealers or from the Subsistence Department at original cost price, thus, in effect, making the ration to consist of as many components as may be desired. In my opinion no better system than the present could be devised for feeding our troops, none that would be more elastic, more economical, or better suited to our service and the necessities of our soldiers. If the first two recommendations within of Surgeon Smith are carried out, in my opinion the ration will be found ample, not only in quantity, but in variety.

R. MACFEELY,
Commissary-General of Subsistence.

APPENDIX B.

COL. JOHN GIBBON'S REPORT ON THE ARMY RATION.

FORT SNELLING, MINN., *March 5, 1881.*

ADJUTANT-GENERAL,

Department of Dakota, Saint Paul, Minn. :

SIR: Some time since I read a very instructive and interesting report on the subject of the Army ration, prepared by Surgeon Joseph R. Smith, medical director, Department of Texas (copy inclosed).

It will be seen that, in the course of his investigations, Dr. Smith makes a comparison between the *cost* of rations sold and the cost of food bought in various companies and regiments serving in the Department of Texas. The amount of the former is somewhat increased by receipts from other sources besides the sale of rations.

Table IX shows about \$39,000 received by company funds, and about \$36,000 expended for food. Of the former sum about \$30,000 appears by Table XVIII to have accrued from the sale of component parts of the ration. But in this latter table the period embraced is three months less, and the number of companies is three less than in Table IX, hence I will assume that nearly all of the \$39,000 in Table IX was the proceeds from the sale of the soldiers' rations. It appears then that, say, \$3,000 more was received from rations sold than was expended in food for the men. This fact legitimately leads to the conclusion that \$3,000 *worth of food* has been withheld from the men, but it does not by any means follow that the men have not received in *pounds* the amount of rations to which they are entitled by law; nor does it show that the amount of nutriment consumed by the soldier is less than that contained in the whole of the food ration to which he is entitled. This last fact is the more important one of the two to be established, and can only be done by an analytical investigation.

The former fact (the amount of food in *pounds* received by the soldier), although of less importance than the latter, is of far more importance than any resulting from a comparison between the *money value* of the food bought and sold. In fact the difference in *money value* establishes nothing so far as regards the *subsistence received by the soldier*. He does not eat the money, and if it can be shown that he consumes a greater number of *pounds* of food than the whole number issued to him by the government, it appears to me that the conclusion drawn by Dr. Smith in this paper, that the soldier does not receive the whole of his ration (or its equivalent), must fall, and with it the corollary that the ration is now large enough.

It is a well-known fact that at most western posts a pound of bacon or pork is

worth from three to five times as much as a pound of fresh beef or game. An examination of Table XIX will show that the average price of fresh meat bought by the companies in Texas is 4.2 cents per pound. I can find in the paper no means of determining for how much per pound the pork and bacon of the companies were sold. At the posts in the Northwest, especially in the vicinity of mining regions, it sells as high as twenty and twenty-five cents per pound. Other articles of the ration, such as sugar, coffee, vinegar, &c., command correspondingly high prices. At many of the posts, and I expect at most of those, except such as are situated in the most unfavorable positions, the price of vegetables and most other food articles purchased for the use of the companies is low, so that the companies sell their articles at high prices and buy at low.

This, then, is the problem for solution: How much (in pounds, *not dollars*) did the companies sell, and how much did they buy? If the latter exceeds the former, then, surely, the men consumed more than the legal ration, and this latter is not sufficient; for it should be large enough to properly subsist the men under all contingencies. If the ration is not sufficient under all contingencies, then the men will go hungry, as General Stanley says, at the very time of all others when they should be well fed, namely, whilst serving in the field cut off from all other food.

To aid in the solution of the problem in question, I caused a circular to be issued to the company commanders of the Seventh Infantry (copy inclosed). The information gathered from the reports submitted by the company commanders is consolidated in Table A, herewith. The most important fact established by this table is set forth in columns numbered 2 and 4. Column 2 shows that during the year 1880, 129,188 pounds of food were bought and consumed by the companies at a cost of \$3,248.71. By column 4 it appears that 40,646 pounds of the ration (including candles and soap) were sold during the same period, bringing in the sum of \$2,637.99. Making due allowance for possible errors, it thus appears that the companies have received more than three times as much food as they sold, at an increase of cost over the sales of only \$610.72. This fact alone demonstrates that the companies have lost nothing in food by the sale of a part of the ration. On the contrary they have gained, and gained so largely as to overbalance any loss resulting from the abstraction of one-third of the flour by the post bakery. Most of the companies note a large purchase of flour, which would seem to show that that constituent of the issued ration is not large enough.

Column 3, which must necessarily be largely the result of estimates (but which are deemed within limits), shows that the food of the companies has been increased by considerably more than one-half of the total amount of rations issued. (Column 1.) (Estimating the ration at three pounds.)

Column 5 shows that the amount of food consumed by the companies, exceeds by more than one-half the full amount issued by the government. This excess per man, per day, varies (column 7) from a minimum of three-fourths pounds, scant, to a maximum of three pounds, large, the general average being about one and sixty-nine-hundredths (1.69) pounds. In other words, the soldier consumes more than one and one-half pounds more food than the government issues to him, including the value of soap and candles.

These figures amply demonstrate the fact that the ration issued by the government is not large enough, even when the men get it all or its equivalent, and hence it is that men are hungry at the very time of all others when they should not be so, that is, when they have the most work to do.

I have no reason to suppose that the results in other regiments will be found to differ essentially from those demonstrated in mine; should there be any doubt upon this point, I respectfully recommend that this investigation be extended to other commands.

Congress has repeatedly recognized the fact that the ration is too small, by always increasing it during wars; by providing that certain ordnance men shall receive one and one-half rations daily (sec. 1293), and by adding to their ration whenever militia serve on the western frontier (sec. 1655). I have no doubt that could this inquiry be extended so as to include the purchase of food by soldiers from all sources (post traders, &c.), the disparity between the amount of the ration issued and the amount of food consumed would be shown to be still greater.

In accordance with the foregoing, I respectfully recommend:

1st. That the present ration be increased 4 ounces of bread or flour; 1.6 ounces of rice *in addition* to the present ration of beans or pease, and 9.6 ounces of potatoes, these last being replaced in the field, when practicable, by an issue of dried fruit and molasses, or by an equivalent increase in bacon, sugar, and coffee.

The increase recommended is the same as that suggested by Surgeon Glover Perin, whose valuable investigations upon the nutritive properties of the constituent of the ration lead directly up to the proposed increase.

The whole proposed increase amounts to 15.2 ounces, which ought to be sufficient except under the most extraordinary circumstances, such as are not likely to exist in our bountifully provided country, for any considerable length of time.

2d. That all expenditures of company funds be prohibited except for the purchase of food for the men. If this is adopted, it will obviate one serious objection, very strongly and properly urged by Surgeon Smith.

3d. That table furniture of a duly prescribed and suitable kind be furnished by the government. I never have been able to understand the propriety of furnishing table furniture, books, &c., from the proceeds of the sale of rations, in preference to using the funds resulting from the sale of surplus forage, fuel, or ammunition.

As this is a matter closely concerning the welfare of the whole Army. I recommend that this report be referred to the chief commissary of subsistence and the medical director of the department for an expression of their views, and then, if deemed appropriate, that it be forwarded for the action of higher authority.

I am, sir, very respectfully, your obedient servant,

JOHN GIBBON.
Colonel Seventh Infantry.

[Circular.]

HEADQUARTERS SEVENTH INFANTRY,
Fort Snelling, Minn., January 18, 1881.

Company commanders will forward to regimental headquarters, as soon as it can be prepared, a tabular statement for the four quarters of the year 1880, setting forth the following facts:

The amount, in pounds and ounces, of each article sold from the company rations, with the price obtained for each.

The amount, in pounds and ounces, of all articles of food, with the cost thereof purchased for the use of the company.

The amount, in pounds, of all rations issued to the company (including the full ration of bread or flour), calculating the full ration at three pounds.

As far as can be ascertained, the amount, in pounds, consumed by the company outside of the amount purchased (such as vegetables from post or company gardens, game, &c.).

This information will be consolidated on forms furnished to companies from regimental headquarters.

As this is an important matter, required to demonstrate whether or not the ration as now issued to the men is large enough, the regimental commander directs that company commanders give it their careful personal attention.

By order of Col. John Gibbon.

E. E. HARDIN,
Second Lieutenant, Acting Adjutant Seventh Infantry.

Official.

E. E. HARDIN,
Second Lieutenant, Acting Adjutant Seventh Infantry.

TABLE A.

Company.	1	2		3	4		5	6	7
	Total rations issued.	Food bought.		Produced by company.	Rations sold.		Total consumed by company.	Excess of consumption over issue.	Excess per man.
		<i>Pounds.</i>			<i>Pounds.</i>				
Band	22,680	2,920	\$202 66	11,340	2,122	\$144 12	34,818	12,138	11
A	54,852	27,100	552 19	23,736	4,267	458 46	101,421	46,569	24
B	37,608	6,066	251 05	8,272	3,316	246 14	48,630	11,021	11
C	49,078	4,165	185 11	27,734	3,242	232 49	77,735	28,657	14
D	44,994	17,073	399 94	18,400	4,914	259 13	75,553	30,559	22
E	35,412	2,212	156 65	7,425	2,078	196 11	42,971	7,559	7
F	41,553	8,557	209 89	8,357	2,196	139 76	56,270	14,717	13
G	44,901	20,182	309 94	28,100	2,792	225 25	90,391	45,490	37
H	50,850	5,203	268 71	19,940	1,916	184 34	74,077	23,227	19
I	52,361	29,720	408 69	22,000	11,576	338 55	92,505	40,144	36
K	48,960	5,990	303 88	19,950	2,227	213 64	72,672	23,712	19
Total	483,249	129,188	3,248 71	195,254	40,646	2,637 90	767,043	283,793	

Adding columns 1, 2, and 3 together and subtracting column 4 gives column 5. Subtracting 1 from 5 gives 6. Dividing column 6 by 366, and dividing the quotient by the average number of men drawn for, gives column 7. Signifies here plus.

HEADQUARTERS DEPARTMENT OF DAKOTA,
OFFICE CHIEF COMMISSARY OF SUBSISTENCE,
Saint Paul, Minn., March 24, 1881.

Respectfully returned to the Adjutant-General Department of Dakota, expressing my thanks for the information contained in the pamphlet of Dr. Joseph R. Smith, on the subject of the soldier's ration, herewith referred to me, also thanking General Gibbon for his paper further discussing the same subject.

If the ration be unsatisfactory, the Subsistence Department will be blamed for it, and this, too, by intelligent officers.

The Subsistence Department, together with all officers who take a due interest in the welfare of the soldier, desire to have the Army well and sufficiently subsisted, and, with such officers, wish at the same time to guard against extravagance in this as in all other matters intrusted to their care.

By intelligent discussion among those who are competent to shed light on the subject, we may alone hope to arrive at the facts.

The ration of the soldier, as now issued, is :

Pork or bacon	ounces..	12
Or salt beef	do...	22
Fresh beef or mutton	do...	20
Flour or soft bread	do...	18
(Where vegetables cannot be raised, the bread ration may be increased to	do...	22)
Or hard bread	do...	16
Or corn meal	do...	20
And to each 100 rations—		
Beans or pease	pounds ..	15
Or rice or hominy	do...	10
Coffee, green	do...	10
Or coffee, roasted	do...	8
Or tea	do...	2
Sugar	do...	15
Vinegar	gallon..	1
Candles	pounds..	1½
Soap	do...	4
Salt	do...	4
Pepper	ounces..	4

In lieu of some components of the ration, other articles, such as fish—dried, fresh or pickled; molasses; canned fresh or corned beef; beans and cheese, are, under certain circumstances, issued.

The above is the ration as established by section 2, of the act aproved June 20, 1864, and published in General Orders No. 216, War Department, Adjutant-General's Office, June 22, 1864, except as increased since the close of the late war, as follows, viz :

By General Orders No. 16, Headquarters of the Army, Adjutant-General's Office, 1879, the ration of salt beef was changed from 20 ounces to 22 ounces; the ration of tea from 1½ to 2 pounds to the hundred rations, and the ration of salt from 3½ to 4 pounds to the hundred rations.

These changes were made, it is supposed, by virtue of the authority vested in the President, under section 1146, Revised Statutes, of February 1, 1878. This was originally enacted April 14, 1818.

Since the issuance of this edition of the statutes, there has been nothing of an authoritative nature published on the subject of the soldier's ration, except that contained in General Orders No. 16, of 1879, hereinbefore referred to.

The President undoubtedly has the authority given him to change the components of the ration as to him appears best. To show this, I will make some quotations:

“On the 15th of December, 1818, the Speaker.” I am informed, “laid before the House of Representatives the report of the Secretary of War (Mr. Calhoun), made in obedience to the resolutions of the House, passed on the 17th of April previous.” In this report occur the following: “On the quality of the ration and the system of supplying and issuing it, * * * the health, comfort and efficiency of the Army mainly depend. * * * All human efforts must, of necessity, be limited by the means of sustenance. Food sustains the immense machinery of war, and gives the impulse to all its operations; and if this essential be withdrawn, even but for a few days, the whole must cease to act. No absolute standard can be fixed as regards either quantity or quality of the ration. * * * Our people, even the poorest, being accustomed to a plentiful mode of living, require, to preserve their health, a continuation in a considerable degree, of the same habits of life, in a camp; and a sudden and great departure from it, subjects them, as is proved by experience, to great mortality. * * * However well qualified for war in other respects, in the mere ca-

capacity of bearing privations, we are inferior to most nations. An American would starve on what a Tartar would live with comfort. * * * Impressed with this view of the subject considerable changes have been made in the ration, under, * * * [under what is now known as section 1146, Revised Statutes, edition 1878.] The vegetable portion of the ration has been much increased. * * * Fresh meat has also been substituted twice a week for salted. In the Southern Division, bacon and kiln-dried Indian-corn meal have been to a certain extent substituted for pork and wheat flour."

Under authority given to the President by section 2 of the act of April 14, 1815 (section 1146, Revised Statutes, edition 1878), an allowance of 4 pounds of coffee and 8 pounds of sugar to every 100 rations had been substituted, on the 25th of October, 1832, for the allowance of one gill of rum, whisky, or brandy, which was then allowed by law.

According to this, the President, under the authority identical with that which he now possesses, increased the ration: changed one kind of meat for another, and substituted coffee and sugar for rum, whisky, or brandy, which were authorized by law.

In European armies, I believe the commander-in-chief of an army, in time of war, has the power to increase the ration, and to change its component parts.

The only bread which the Subsistence Department issues is hard bread, and at the rate of 16 ounces to the ration. The department issues 18 ounces of flour, which the "post fund" bakes, and issues to the soldier 18 ounces of soft bread. Our Army, from June, 1864, until this time has served and fought on the ration as it is now. Our volunteers stood it and fought on it splendidly and successfully.

The circumstances under which our troops did so well during the late war on the present ration were not quite so favorable as those under which our men campaign ordinarily. The mess-kit of a company was scant, and the squad of men who messed together was very small.

In the early part of the late war, viz, in January, 1862, before the ration was reduced to about what it is now, an English writer of celebrity, Anthony Trollope, in his "North America," writing of the "Northern Army," states: "The great boast of this army was that they eat meat twice a day, and that their daily supply of bread (22 ounces) was more than they could consume."

Mr. Trollope quotes Mr. Olmstead, a writer not unknown to fame, "secretary to a sanitary commission on the Army," as saying, "that food was universally good and abundant." Mr. Trollope says of this: "On this matter Mr. Olmstead might have spoken in stronger language without exaggeration. The food supplied to the American Armies has been extravagantly good, and certainly has been wastefully abundant." But there are many living witnesses of the manner in which our Army was subsisted. The expense of the war caused anxiety to all thoughtful, patriotic persons who were knowing to the facts.

Supposing that the Subsistence Department saw the ration of the soldier as did Mr. Trollope, and that department had good opportunity for seeing it, as well as for knowing something of the expense of the war, would it not have been wrong of them if they had not recommended to the Secretary of War that it be reduced in those components which demanded reduction.

March 8, 1864, Mr. Wilson, of Massachusetts, chairman of the Senate Committee on Military Affairs, addressed the Secretary of War a communication on the subject of the ration, which was referred to the Commissary-General of Subsistence, who reported that the ration was too large, and recommended that it be reduced and the value of this reduction be added to the soldier's pay. The ration was reduced and the pay increased, so that the pay of a private of artillery, infantry, and cavalry was increased from \$11 and \$12 to \$16 per month.

So much for the assertion that "volunteers would not stand it a month," and that "during the late civil war the first move in the Subsistence Department was to increase the ration and to reduce it again so soon as the war was ended."

It is stated that "Congress has repeatedly recognized the fact that the ration is too small, by always increasing it during wars: by providing that certain ordnance men shall receive one and one-half ration daily (section 1293), and by adding to their ration whenever militia serve on the western frontier (section 1655)."

Congress has not always, I believe, increased the ration during wars; but sometimes, only at the commencement of wars, when it is known that raw troops, knowing nothing of the preparation or care of their food, will waste a great deal, and will also, in their novel life, eat more than will old soldiers. I submit these as reasons why the ration may have been, with reason, increased at the commencement of wars, though it be reduced, as in the late war, when the raw troops have become veterans. This will also explain why Congress has never abolished the act of 1795 (section 1655, Revised Statutes), increasing the ration of bread, salt meat, and salt, for the militia.

By section 11 of an act which became a law February 8, 1815, entitled "An act for the better regulation of the Ordnance Department," it was provided that master armorers, master carriage makers, master blacksmiths, armorers, carriage makers and

blacksmiths, should each receive "one and a half ration per day"; and that artificers and laborers should each receive "one ration per day." During the war, the designations of those entitled to one ration and a half per day, were changed to "sergeants" and "corporals," and the designations of those who received one ration per day, were changed to "privates of the first class" and "privates of the second class."

The fact that sergeants and corporals of ordnance (section 1293, Revised Statutes), receive a ration and a half per day, I submit, only proves that Congress recognizes the fact that the ration is too small in the cases of the persons named.

By section 1297, Revised Statutes, Congress enacts that certain ordnance men shall have no allowance of clothing. This will hardly be called a Congressional recognition to the effect that there should be no allowance of clothing to the enlisted men of the Army.

It is stated, "This then is the problem for solution. How much (in pounds, *not dollars*) did the companies sell, and how much did they buy?" In pounds, not dollars, I suppose? "If the latter exceeds the former, then surely the men consumed more than the legal ration, and this latter is not sufficient."

If a regiment sells 1,000 pounds of bacon at twenty cents, which is not an unusual price, per pound, and buys 8,000 pounds of potatoes, in lieu, the problem would not be solved, although its conditions are satisfied.

According to Parkes, in 100 parts of fat pork, bacon, and potatoes, the fats are, respectively, 48.9, 73.3 and .1.

The question of the nutritive qualities of the components of the ration has a most important bearing in deciding what constitutes a sufficient ration for the soldier, but I will leave this to be discussed by the medical director of the department.

The Commissary General of Subsistence has more than once recommended to the Secretary of War, "that bakers should be specially enlisted, paid extra-duty pay, say \$4 per month, and assigned to posts, as are commissary sergeants." I would recommend that a baker be included in the organization of each company in the Army; that his regular pay per month be \$4 more than that of a private soldier, and, that while actually employed as a baker at a post, he receive, through the Subsistence Department of the Army, extra pay at the rate of from 20 to 35 cents per day, depending upon whether he was second class or first class. This compensation, added to a soldier's pay, food, and clothing, will command good bakers.

I have long believed that the soft bread ration was not sufficient, and would therefore recommend that this ration of the soldier, at established posts, be 18 ounces of flour, as at present, or 22 ounces of soft bread; that the Subsistence Department bake the bread, fuel being supplied by the Quartermaster's Department for this purpose, as for preparing for food other articles of the ration; that the materials used in making the ferment, viz, salt, potatoes, hops, &c., be charged to any excess of bread over the 22 ounces issued, made from the 18 ounces of flour; that at the end of each month the acting assistant commissary of subsistence credit each detachment at the post, *pro rata*, with any balance still due from the product of the flour ration, issuing to them in the next month the money value of any such balance in stores required by such detachment and which the Subsistence Department can spare for issue.

At other places than established posts, the flour will be issued and the detachments may have it baked by their bakers.

Under paragraph II, General Orders No. 86, Headquarters of the Army, Adjutant-General's Office, September 10, 1877, "Four pounds of yeast powder to the hundred (100) rations of flour may be issued to troops in the field, when necessary."

By paragraph I, General Orders No. 42, War Department, Adjutant-General's Office, 1875, "At posts where fresh vegetables cannot be raised, the ration of bread will be increased, at the discretion of the Department Commander, from 18 ounces to 22 ounces." In all such cases as this last, I would suggest that the ration of beans be increased to 25 pounds to the 100 rations, or a proportional increase of rice.

While I have been unable to ascertain what is the maximum ration given to soldiers in any of the European armies in time of war, I have satisfied myself that in time of peace the Army of these United States receives a more liberal ration from its government than is given by any European nation to its army.

Although our armies fought well and successfully during the latter part of the late war, on the present ration (I have hereinbefore stated that it has been increased slightly since), with only an occasional complaint, when the ration was received, I suggest that, circumstanced as is our Army, having long periods of rest (when an abundance of fresh vegetables may be attainable), interrupted by short campaigns in which, perhaps, a sudden effort is required and during which the appetite of the soldier has been increased by the greater activity of the body and by outdoor life, while the food with which to satisfy this appetite has decreased, such decrease being caused by the loss of fresh vegetables and the lack of facilities for its preparation, so that the ordinary ration can be neither economized or utilized, it must result that the soldier in campaigning will be often hungry. I am inclined to believe that a deficiency in the ration is more felt by men in short expeditions than in prolonged wars, and

therefore would most respectfully suggest certain changes in the present ration to adapt it to the wants of our Army in campaign. I do this, bearing in mind the statement of Hon. John C. Calhoun, Secretary of War, already quoted, viz: "No absolute standard can be fixed as regards either quantity or quality of the ration." I would suggest the increase to apply only to troops in campaign for a longer period than ten (10) days.

Edmund A. Parkes, M. D., F. R. S., gives the average daily water-free diet required for an adult man in very laborious work, or of a soldier on service and in the field:

	Ounces avoird.
Albuminates.....	6. to 7.
Fats	3.5 to 4.5
Carbo-hydrates	16. to 15.
Salts	1.2 to 1.5

An increase in our ration that would nearly satisfy the above conditions would be for each man per day 8 ounces of fresh beef, 4 ounces of flour or 6 ounces of corn meal, and one and six-tenths ounces of beans.

I would again quote from Secretary-of-War Calhoun. * * * "Corn meal has another and, in my opinion, great and almost decisive advantage; it requires so little art to prepare it for use. It is not easy to make good bread of wheat flour, whilst it is almost impossible to make bad of that of Indian corn; besides, wheat is much more liable to be damaged than the Indian corn, for the latter is better protected against disease and the effects of bad seasons in time of harvest than any other grain, and when injured the good is easily separated from the bad. Experience proves it to be not less nutritious than wheat or any other grain. Parched corn constitutes the principal food of an Indian warrior, and such are its nutritive qualities that they can support long and fatiguing marches on it alone."

I have not suggested any increase to the pork ration, as the "fat" is now thought to be in excess of Mr. Parkes' requirement. The articles which I suggest be increased are all produced in abundance in this country, and can be supplied with due regard to economy. I would urge that in campaign kiln-dried corn meal be taken instead of flour, as it is, if taken in the proportion I have suggested, as nutritious and as cheap as flour, and more easily prepared for food.

This ration will not admit of the purchase out of any presumed or actual excess, of silver-plated table ware, bricks, books, bones, musical instruments, cigars, coffin-tacks, cribbage-boards, fire-crackers, mirrors, postage, or printing, &c. The above are some of the articles mentioned by Dr. Smith as purchased and charged to company fund accounts.

There should be nothing purchased with the proceeds of "savings" of the ration but food. It is understood that the ration is not in excess of the needs of the soldier for food. Under different circumstances the soldier will need some articles more than others, to supply which the company commander may sell that which is not required and purchase that which is.

It may be of benefit to suggest that no enlisted man be permitted to make any sale of subsistence stores at or near any camp or station occupied by troops.

The mess furniture should be furnished by the government, each company commander accounting for it, as he does now for public property in his possession.

The department commander should have authority to announce in advance, within his command, when the increased ration may be issued.

M. R. MORGAN,
Major and Commissary Subsistence, Chief Commissary Subsistence.

[Second indorsement.]

HEADQUARTERS DEPARTMENT OF DAKOTA,
MEDICAL DIRECTOR'S OFFICE,
Saint Paul, April 6, 1881.

Respectfully returned to the adjutant-general of the department.

The inclosed reports of Surgeon J. R. Smith, U. S. A., and Col. John Gibbon, Seventh United States Infantry, are valuable additions to our knowledge of Army administration respecting the soldiers' ration. I trust these investigations will be continued so as to show the kind and quality of food saved and purchased for a given number of men; and at the same time give statistics as to the occupations of the men in the company, whether on company duty, or detailed as mechanics, teamsters, laborers, &c., until such time as may be necessary to determine what increase of the ration, if any, is required.

The report of Surgeon Smith shows plainly the urgent need of reformation in regard to the kind of purchases which should be allowed to be made from the company fund. The initial step in all efforts to improve the diet of the soldier, should be to prohibit the expenditure of the proceeds arising from the sale of saved portions of the rations for anything but food. This rule should apply also to the hospital fund. Such a

ration should be given the soldier as will best prepare him for the work required of him, and it should be applied to that purpose alone.

It is well known that the 18 ounces of soft bread furnished the soldier is not more than three-fourths of the nutritive value of the ration of flour.

In relation to the nutritive value of the established ration, attention is invited to the inclosed analysis, dated Fort Leavenworth, Kans., March 5, 1875. It will be observed that from the conclusions arrived at by various physiological experiments on the quantity of anhydrous food necessary to maintain an adult man in health while in activity, our ration is certainly insufficient.

On page 5 an increase and modification of the present ration was recommended.

It was believed necessary to recognize by competent authority, in the standard ration that an antiscorbutic was essential to the preservation of health. The quantity of potatoes, or other antiscorbutic equivalent, might be reduced to 4 ounces, if the reforms suggested in regard to the kind of expenditures to be made from the company fund were carried out.

Having carefully noted the remarks of Maj. M. R. Morgan, chief commissary of the department, I heartily commend them as containing suggestions worthy of thoughtful consideration.

The increase of the ration of beans at posts where no vegetables can be raised, would be practicable and in the direction of proper nutritive value, although it does not answer the needs of an antiscorbutic. An increase of the ration, by 8 ounces of beef, 4 ounces of flour, $1\frac{6}{8}$ ounces of beans, for troops on a campaign of more than ten days, would be sufficient to develop the physical energy required at ordinary temperatures. It has been suggested that should the company fund exceed a specific sum the surplus should be turned over to the Subsistence Department.

I concur in the remark "that no enlisted man be permitted to make any sale of subsistence stores at or near any station occupied by troops."

G. PERIN,
Surgeon, U. S. A., Medical Director.

[Third indorsement.]

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, August 4, 1881.

Respectfully returned to the Adjutant-General of the Army.

Having carefully read the papers herewith, I find no reason for changing the views expressed on this subject in my indorsement of June 1, 1881, returning the report of Surgeon Joseph R. Smith, United States Army.

In within letter it is observed that the writer recommends that the flour ration be increased by 4 ounces, although admitting (page 6, manuscript; page 2, printed copy) that at present one-third of the flour is abstracted by the post bakery. So long as one-third, or any portion, of the flour ration is regularly abstracted by the post bakery, and is taken to increase the post fund, it would seem that it should not be seriously asserted that the flour ration is insufficient for the soldier.

As stated in my indorsement of June 1, 1881, above referred to, I concur in the recommendation of Surgeon Smith—1st, "That existing regulations and orders be so modified that the soldier may receive the whole of his authorized ration of *flour*, either in the shape of flour or bread; and 2d, That the soldier receive the whole of his ration, or the product of its barter in the shape of food."

As also stated in that indorsement, "In my opinion, no part of the savings from the ration should go to the *post fund*, but all to the company fund; that no part of the savings should, *as now allowed*, be expended for post schools, post libraries, gymnasiums, chapels, or for any purpose or articles whatever, other than articles of food."

R. MACFEELY,
Commissary-General of Subsistence.

APPENDIX C.

VIEWS OF GENERAL A. B. EATON, COMMISSARY-GENERAL OF SUBSISTENCE, ON THE SUBJECT OF THE ARMY RATION.

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, D. C., June 10, 1873.

General W. T. SHERMAN, *U. S. Army, Present:*

GENERAL: * * * *

I would remark that the Subsistence Department issues flour (not soft or loaf bread) to the troops, and that this flour is made into bread by the troops (under the control of the post commander at the post bakery), and not by the Subsistence Department.

The soldier is justly entitled to all the bread that is necessary for his full subsistence, even if it takes all the bread that can be made from his ration of flour (18 ounces), after deducting the trifling quantity necessary to pay the expenses of baking.

The trouble arises not from insufficiency in the ration of flour, but from the effort to make the post bakery a money-making machine, for purposes foreign to the soldier's subsistence—for support of bands, libraries, &c. It is believed that if properly managed, wholly in the interest of the soldier's subsistence, the 18 ounces of flour actually issued for him by the Subsistence Department would give the soldier all the bread necessary for his reasonable subsistence, and that, looking simply to the subsistence of the soldier, no increase is required in the flour ration.

What is required is that the soldier's mess shall get the full benefit of the ration now issued for him by the Subsistence Department, and that no part of it shall be diverted from its legitimate purpose by the unjust contrivance called the post fund.

Very respectfully, your obedient servant.

A. B. EATON,
Commissary-General of Subsistence.

REPORT OF THE SURGEON-GENERAL.

REPORT

OF

THE SURGEON-GENERAL.

WAR DEPARTMENT,
SURGEON-GENERAL'S OFFICE,
Washington, October 1, 1881.

Sir: I have the honor to submit the following statement of finances and general transactions of the Medical Department of the Army for the fiscal year ending June 30, 1881:

FINANCIAL STATEMENT.

Appropriation for the Medical and Hospital Department, 1877:	
Balance from previous fiscal year.....	\$1,029 46
Disbursed during the year.....	1,029 46
Medical and Hospital Department, 1878, and prior years:	
Balance from previous fiscal year.....	1,421 59
Appropriated by act of March 3, 1881.....	1,072 30
Refunded during the year.....	56 00
	<u>2,549 89</u>
Disbursed during the year.....	\$1,072 30
Carried to the surplus fund.....	1,477 59
	<u>2,549 89</u>
Medical and Hospital Department, 1879:	
Balance from previous year.....	95 22
Disbursed during the year.....	\$80 75
Carried to surplus fund.....	14 47
	<u>95 22</u>
Medical and Hospital Department, 1880:	
Balance from previous fiscal year.....	47,251 62
Refunded during the year.....	2,413 52
	<u>49,665 14</u>
Disbursed during the year.....	46,373 08
	<u>3,292 06</u>
Medical and Hospital Department, 1881:	
Appropriated by act of May 4, 1880.....	200,000 00
Disbursed during the year.....	142,894 57
	<u>57,105 43</u>
* Balance June 30, 1881.....	<u>57,105 43</u>

* This entire amount will be required to meet obligations for which contracts were made prior to July 1, 1881; \$53,929.28 of which has been disbursed since June 30, 1881, in fulfillment of said contracts.

Artificial limbs, 1877:

Balance from previous fiscal year.....	\$3,476 90
Appropriated by act of March 3, 1881.....	138 40
Transfer warrant.....	157 84
	<hr/>
	3,773 14
Disbursed during the year.....	\$296 24
Balance June 30, 1881.....	3,476 90
	<hr/>
	3,773 14

Artificial limbs, 1878:

Balance from previous fiscal year.....	1,927 77
Disbursed during the year.....	26 00
	<hr/>
Balance June 30, 1881.....	1,901 77

Artificial limbs, 1879:

Balance from previous fiscal year.....	30,921 27
Disbursed during the year.....	51 46
	<hr/>
Balance June 30, 1881.....	30,869 81

Artificial limbs, 1880:

Balance from previous fiscal year.....	62,790 44
Disbursed during the year.....	2,975 28
	<hr/>
Balance June 30, 1881.....	59,815 16

Artificial limbs, 1881:

Appropriated by act of June 16, 1880.....	250,000 00
Appropriated by act of March 3, 1881.....	200,000 00
	<hr/>
	450,000 00
Disbursed during the year.....	420,041 29
	<hr/>
Balance June 30, 1881.....	29,958 71

Appliances for disabled soldiers, 1879:

Balance from previous fiscal year.....	2,887 00
Balance June 30, 1881.....	2,887 00

Appliances for disabled soldiers, 1880:

Balance from previous fiscal year.....	790 00
Disbursed during the year.....	80 00
	<hr/>
Balance June 30, 1881.....	710 00

Appliances for disabled soldiers, 1881:

Appropriated by act of June 16, 1880.....	3,000 00
Disbursed during the year.....	524 00
	<hr/>
Balance June 30, 1881.....	2,476 00

Medical and Surgical History:

Balance from previous fiscal year.....	16,353 05
Disbursed during the year.....	2,964 90
	<hr/>
Balance June 30, 1881.....	13,388 15

Museum and Library, 1880:

Balance from previous fiscal year.....	825 00
Disbursed during the year.....	825 00
	<hr/>

Museum and Library, 1881:

Appropriated by act of May 4, 1880.....	10,000 00
Disbursed during the year.....	9,380 14
	<hr/>
Balance June 30, 1881.....	619 86

Expended in providing trusses for ruptured soldiers, seamen, and marines, under act approved May 28, 1872, extended by act of March 3, 1879.....	5,333 50
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ARTIFICIAL LIMBS.

There were furnished during the fiscal year, in kind, trusses, 574; artificial legs, 652; arms, 14; foot, 1; apparatus for legs, 2; apparatus for arm, 1. By commutation, legs, 2,546; arms, 2,754; feet, 55; apparatus for legs, 343; apparatus for arms, 608.

The number of persons allowed artificial limbs or commutation up to June 30, 1881, is 14,501. Of these 7,680 applied prior to June 17, 1870. From that time to June 17, 1875, 4,857 made their first applications; 1,716 to 1880, thence to June 30, 1881, 248.

As nearly as can be ascertained the dates of injuries for which applications for limbs have been made are: From 1813 to 1860, inclusive, 132; from 1861 to 1865, inclusive, 14,094; from 1866 to 1880, inclusive, 275.

The first issue, ending June 16, 1870, included 7,680 names; the second, ending June 16, 1875, 11,719; the third, 11,706; and that part of the fourth issue extending to June 30, 1881, 6,695.

Of the beneficiaries of the first period, 713 have not been heard from since 1870. With very few exceptions these are no doubt dead, indicating an annual death rate for that period of 11.6 per 1,000. Of the names occurring in the second issue, 1,831 have not appeared since, which indicates a death rate of 31.25 per 1,000. If the same ratio were to continue till June 30, 1881, there would be a further loss of 2,195, making 4,740 in all. Hence it is probable that of the entire number there are little more than 10,000 now remaining.

MEDICAL AND HOSPITAL SUPPLIES.

The cost of the medical and hospital supplies actually issued during the last fiscal year was \$183,253.42; and referring to my last annual report I deem it my duty to again call attention to the necessity for an increased appropriation to meet the actual expenses of the Medical Department, and to provide for emergencies which may arise for the fiscal year ending June 30, 1883.

The stock of supplies of durable nature left on hand at the close of the late war has become so nearly exhausted that, with few exceptions, they cannot be depended upon as heretofore to fill requisitions. I am of the opinion that the sum of \$250,000 will be required for the use of the Medical Department for the next fiscal year for the purchase of medical and hospital supplies, for expenses of purveying depots, for pay of employés, for pay of private physicians and nurses employed in emergencies at posts or stations for which no other provision is made, and for other miscellaneous expenses of the Medical Department. Another important reason for recommending an increased appropriation is the fact that the Medical Department is obliged to furnish medical and hospital supplies for the use of several thousand Indians as prisoners of war.

HEALTH OF THE ARMY DURING THE FISCAL YEAR ENDING JUNE 30, 1881.

The monthly reports of sick and wounded received at this office up to September 5 represent an average mean strength of 21,160 white, 2,344 colored troops, and 300 Indian scouts.

Among the *white troops* the total number of cases of all kinds reported as taken on the sick list was 37,408, being at the rate of 1,768 per 1,000 of mean strength.

Of this number, 32,013, or 1,513 per 1,000 of strength, were taken on sick report for disease, and 5,395, or 255 per 1,000 of strength, for wounds, accidents, and injuries of all kinds.

The average number constantly on sick report during the year was 932, or 44 per 1,000 of mean strength. Of these, 739, or 35 per 1,000 of strength, were constantly under treatment for disease, and 193, or 9 per 1,000 of strength, for wounds, accidents, and injuries.

The total number of deaths from all causes reported among the white troops was 197, or 9 per 1,000 of mean strength. Of these 130, or 6 per 1,000 of strength, died of disease, and 67, or 3 per 1,000 of strength, of wounds, accidents, and injuries.

The proportion of deaths from all causes to cases treated was 1 to 190.

The total number of white soldiers reported to have been discharged the service on "surgeon's certificate of disability" was 723, or 34 per 1,000 of mean strength.

Among the *colored troops* the total number of cases of all kinds reported was 4,650, or 1,984 per 1,000 of mean strength. Of these, 4,090, or 1,745 per 1,000 of strength, were cases of disease, and 560, or 239 per 1,000 of strength, were wounds, accidents, and injuries.

The average number constantly on sick report was 106, or 45 per 1,000 of strength, of whom 81, or 34 per 1,000 of strength, were under treatment for disease, and 25, or 11 per 1,000 of strength, for wounds, accidents, and injuries.

The total number of deaths of colored soldiers reported from all causes was 48, or 20 per 1,000 of mean strength. Of these, 26, or 11 per 1,000 of strength, died of disease, and 22, or 9 per 1,000 of strength, of wounds, accidents, and injuries.

The proportion of deaths from all causes to cases treated was 1 to 97.

The total number of colored soldiers reported to have been discharged on "surgeon's certificate of disability" was 98, or 42 per 1,000 of mean strength.

The total number of deaths reported among the Indian scouts was 3. 1 from disease and 2 of wounds.

WORK PERFORMED IN THE RECORD AND PENSION DIVISION.

The number of new official demands upon this division during the fiscal year for information as to the cause of death in the case of deceased soldiers and the hospital record of invalids was 55,040. The average number of such demands during the previous ten years had been 22,241 annually, and the number during the fiscal year terminating June 30, 1880, was 39,241; the number received during the fiscal year ending June 30, 1881, being an increase of 40 per cent. over the previous fiscal year, and of 147 per cent. over the annual average of the previous ten years.

Six thousand nine hundred and sixty-four cases remained unanswered at the commencement of the fiscal year, making 62,004 cases to be disposed of during the year.

Of the new cases 53,438 were from the Commissioner of Pensions, 1,463 from the Adjutant-General of the Army, and 139 from miscellaneous sources.

Search was made and replies furnished to the proper authorities in 40,596 of these cases, viz, 39,388 to the Commissioner of Pensions, 1,081 to the Adjutant-General of the Army, and 127 to miscellaneous applicants, leaving 21,408 unanswered cases on hand on the 1st of July, 1881.

This work becomes more difficult as the period elapsed since the close of the war increases, for the reason that claimants are in many cases unable to furnish accurate or definite data as to time and place of treatment; also, the volumes of hospital records on file in this office are becoming so very dilapidated from constant handling, that the utmost care must be exercised in order that the entries contained therein may not be irretrievably lost, the clerical force not having been sufficient during the past fiscal year, or at any previous time, to permit of the copying of these original records.

The clerical force of the office was increased by forty clerks last March, under the provisions of the act of Congress approved March 3, 1881, but, as on account of the peculiar nature of the work newly appointed clerks experience considerable difficulty in learning the same, some time must necessarily elapse before they can be expected to perform it with the facility and accuracy exhibited by those who, from long experience, are more familiar with the records.

Because of the overcrowded condition of the building Nos. 509-511, Tenth street, northwest, in which the hospital records are filed, forty-two clerks were transferred to the building on the northeast corner of F and Tenth streets, northwest, the second and third floors of which were secured for their accommodation from the 1st of July, 1881, by authority of the Secretary of War.

During the past fiscal year 2,655 monthly reports of sick and wounded have been received from the medical officers in charge of the various posts and stations. These have been examined, consolidated on statistical sheets for use, and the deaths and discharges entered in the appropriate alphabetical registers. Eight hundred and sixty-six monthly meteorological reports were received from medical officers, which have been transmitted to the Chief Signal Officer of the Army for his use, and 992 reports of the medical examination of recruits were received and filed. Seven hundred and twenty-three volumes of hospital records were received from discontinued posts and commands, making the total number of such volumes on file 18,083.

DIVISION OF SURGICAL RECORDS.

The work pertaining to this division of the Surgeon-General's Office has embraced the reception, acknowledgement, and examination of the surgical reports of the medical officers of the Army, the correspondence referring to the reception and classification of specimens received for the Army Medical Museum, and the continuance of the publication of the Surgical History of the War.

Five thousand nine hundred and sixty-two cases of wounds, accidents, and injuries were recorded in Class V of the monthly reports of sick and wounded during the fiscal year ending June 30, 1881, in a mean strength of the Army of 23,804 men. The deaths from wounds received in action or from other violent causes numbered 91, being a proportion of 3.8 per 1,000 of mean strength.

From medical officers in charge of post hospitals, or with detachments of troops in the field, 2,436 official reports were received. Of these, 1,710 were regular quarterly reports, 54 were special, 661 miscellaneous and 11 reports of casualties.

The losses in actions with hostile Indians were 12 killed and 13 wounded; sustained in the following engagements: 1. At Rocky Ridge, Texas, July 30, 1880, in a fight between Companies C and G, Tenth Cavalry, and a number of Apache Indians, Acting Assist. Surg. C. K.

Gregg reported 1 lieutenant and 1 private wounded, and 1 private killed by a shot through the chest. 2. Near Eagle Spring, Texas, August 3, 1880, a party of Indians, 15 in number, attacked a detachment of 5 men of the Tenth Cavalry. Acting Assist. Surg. C. K. Gregg reported 1 private killed and 1 wounded. 3. On August 4, 1880, at Taylor's Cañon, Guadalupe Mountains, Texas, 1 private of the Tenth Cavalry was killed, and 1 wounded; the report was sent by Acting Assist. Surg. M. F. Price. 4. A detachment of Company G, Ninth Cavalry, was attacked on September 1, 1880, by a party of hostile Mescalero Indians at Agua Chiquito, sixty-six miles from the Mescalero Apache Agency, South Fork, N. Mex. Acting Assist. Surg. F. H. Atkins reported 2 privates wounded, death ensuing on the second and third days after; both were shot in the abdomen. 5. On the morning of September 7, 1880, Company A of the Fourth Cavalry and 10 Indian scouts, attacked Victoria's band of Indians in the Mogoleon Mountains, about twenty miles from Fort Cummings, N. Mex.; 1 private and 2 scouts were killed, and 3 privates were wounded. No medical officer was present at the fight; an account of the engagement was sent by Assist. Surg. W. R. Hall. 6. At Ojo Caliente, October 28, 1880, from 20 to 30 Mexican Indians, supposed to belong to Victoria's band, attacked the pickets of the Tenth Cavalry; 1 corporal and 4 privates were reported as killed, by Acting Assist. Surg. W. Church Henderson. 7. One musician and 1 private of the Ninth Cavalry, were wounded in a fight at the Mescalero Indian Agency, N. Mex., December 2, 1880. Reported by Assist. Surg. R. C. Newton. 8. On January 24, 1881, an escort to a wagon train was attacked by Indians at Cruz Cañon, N. Mex. Acting Assist. Surg. F. S. Dewey reported 1 private of Company D, Ninth Cavalry, severely wounded; the man died on January 25, 1881. 9. On April 30, 1881, Acting Assist. Surg. W. Whitney reported a private of Company B, Ninth Cavalry, killed by Apache Indians in the Boca Grande Mountains.

At the close of the fiscal year ending June 30, 1879, 8,862 cases of injuries and operations reported in the Army since the publication of Circular No. 3, in 1871, had been collected; to these have been added, during the last fiscal year, 1,306 cases, viz, 215 injuries of the face, 4 of the neck, 37 of the trunk, 190 of the upper extremities, 100 of the lower extremities, 539 simple fractures, luxations, and sprains, and 221 miscellaneous injuries, making a total of 10,168 cases, namely, 2,499 injuries of the head, 356 of the face, 69 of the neck, 653 of the trunk, 1,766 of the upper extremities, 1,150 of the lower extremities, 2,553 simple fractures, luxations, and sprains, and 1,122 miscellaneous injuries.

Surgical statistics of the war.—From reports of pension examiners and through correspondence with medical officers who served during the war, additional information has been received in 102 cases of injuries received during the War of the Rebellion and from searches in the Pension Office the remote results were ascertained in 886 cases.

PROPERTY DIVISION.

The following is a summary statement of the work performed in the property division of this office during the fiscal year ending June 30, 1881, viz:

Letters received and recorded.....	3,974
Letters sent and recorded.....	1,945
Indorsements sent, charged.....	1,589
Indorsements sent, recorded.....	449
Accounts current examined, recorded and forwarded to Treasury.....	4

Vouchers pertaining to accounts current examined, recorded <i>in detail</i> , approved and forwarded	1,789
Accounts of sales with vouchers settled	64
Miscellaneous notifications	1,376
Statements of funds received, recorded, and forwarded to Treasury	252
Property returns examined and settled	463
Property returns examined and suspended	14
Certificates of non-indebtedness sent	69
Certificates of corrections sent	377
Property returns recorded	463
Property returns prepared in Surgeon-General's Office	47
Letters and indorsements sent, pertaining to property returns	423
Aggregate	13,456

ARMY MEDICAL MUSEUM.

Surgical section.

Specimens in the Museum, July 1, 1880	7,023
Specimens in the Museum, July 1, 1880	7,675
Increase during the year	52

Medical section.

Specimens in the Museum, July 1, 1880	1,534
Specimens in the Museum, July 1, 1881	1,570
Increase during the year	36

Microscopical section.

Specimens in the Museum, July 1, 1880	8,386
Specimens in the Museum, July 1, 1881	8,471
Increase during the year	85

Anatomical section.

Specimens in the Museum, July 1, 1880	2,070
Specimens in the Museum, July 1, 1881	2,121
Increase during the year	51

Section of comparative anatomy.

Specimens in the Museum, July 1, 1880	2,411
Specimens in the Museum, July 1, 1881	2,448
Increase during the year	37

Miscellaneous section.

Specimens in the Museum, July 1, 1880	672
Specimens in the Museum, July 1, 1881	707
Increase during the year	35
Specimens received	154
Specimens transferred	119

The contributors to the Army Medical Museum were 9 surgeons, 28 assistant surgeons, 15 acting assistant surgeons, 3 hospital stewards, 1 private, and 32 civilians.

The names of 34,479 visitors were registered at the Army Medical Museum during the fiscal year ending June 30, 1881.

Sixty-five negatives and 1,802 photographic prints of surgical objects were made, and 1,026 of them were distributed among correspondents and contributors.

Surgical History of the War of the Rebellion.—One hundred and ten drawings on wood, 96 engravings, and 4 lithographic plates were prepared for Volume II of Part III of the Medical and Surgical History of the War, and 152 pages of this volume were completed, advancing the work from page 382 to page 534, inclusive.

LIBRARY.

Nearly two thousand five hundred volumes, and 3,200 pamphlets have been added to the library during the past year, making the total number about 54,000 volumes, and 60,200 pamphlets.

The publication of Volume II of the Index-Catalogue has been completed, and the edition of 1,500 copies is being distributed. The manuscript of Volume III is now going to press.

An estimate has been forwarded for printing Volume IV of the Catalogue, and it is hoped that the appropriation asked for will be granted, in order that the progress of this important work may not be retarded.

A NEW FIRE-PROOF BUILDING A NECESSITY FOR THE ARMY MEDICAL MUSEUM AND LIBRARY.

I would again invite attention to the necessity for a new fire-proof building for the Army Medical Museum and Library, set forth in my last report, and would refer to the following extract from the message of the President to Congress at the commencement of its last session, and request that the subject be again brought to the attention of that body:

The collections of books, specimens, and records constituting the Army Medical Museum and Library are of national importance. The library now contains about 51,500 volumes and 57,000 pamphlets relating to medicine, surgery, and allied topics. The contents of the Army Medical Museum consists of 22,000 specimens, and are unique in the completeness with which both military surgery and the diseases of armies are illustrated. Their destruction would be an irreparable loss, not only to the United States, but to the world. There are filed in the record and pension division, over 16,000 bound volumes of hospital records, together with a great quantity of papers, embracing the original records of the hospitals of our armies during the civil war. Aside from their historical value, these records are daily searched for evidence needed in the settlement of large numbers of pension and other claims, for the protection of the Government against attempted frauds, as well as for the benefit of honest claimants. These valuable collections are now in a building which is peculiarly exposed to the danger of destruction by fire. It is therefore earnestly recommended that an appropriation be made for a new fire-proof building, adequate for the present needs and reasonable future expansion of these valuable collections. Such a building should be absolutely fire-proof; no expenditure for mere architectural display is required. It is believed that a suitable structure can be erected at a cost not to exceed \$250,000.

MISCELLANEOUS.

The requirements of the Army as regards medical officers during the past year have been as follows:

Number of permanent posts.....	152
Number of temporary posts and substations.....	24
Total.....	176
Number of military expeditions in the field during the year.....	17

The services of 34 medical officers were required with these expeditions, and there were also 84 medical officers reported to this office as having been on duty with scouting parties during the year.

The Army Medical Examining Board, convened in New York City on the 7th of November, 1877, for the examination of assistant surgeons for promotion, and of candidates for appointment in the medical corps of the Army, has been continued in session throughout the past year, and since my last report 8 candidates have been found qualified and approved by the board; of whom 4 were appointed and commissioned assistant surgeons, on the 18th of February last, and the names of the remaining 4 have been submitted to the Secretary of War for appointment, and in due time will be presented to the Senate for confirmation.

The following is a recapitulation of the work thus far performed by the Army Medical Examining Board:

Number of assistant surgeons examined for promotion	44	
Number of candidates for appointment in the medical corps invited to appear for examination		221
Number of candidates found qualified	29	
Number of candidates rejected	47	
Number of candidates who withdrew after partial examination	107	
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Total number examined		183
Number of candidates who failed to appear for examination	17	
Number of candidates who declined to appear for examination	20	
Number of candidates remaining to be examined	1	
	<hr/>	
Total number invited but not examined		38

At the date of my last report there were 9 vacancies in the medical corps, all of which were in the grade of assistant surgeon. During the past year 1 assistant medical purveyor, with the rank of lieutenant-colonel, 1 surgeon, with the rank of major, 1 assistant surgeon, with the rank of captain, and 1 lieutenant-colonel, retired, have died, and 1 assistant surgeon, with the rank of captain, has resigned; 1 surgeon, with the rank of major, has been promoted to assistant medical purveyor, with the rank of lieutenant-colonel, and 2 assistant surgeons have been promoted to surgeon, with the rank of major; 4 appointments in the grade of assistant surgeons have also been made; leaving 9 vacancies in the medical corps at the present time in the grade of assistant surgeon.

There are at present 13 medical officers on sick leave of absence, 5 of whom have been found incapacitated for active service and recommended for retirement by army retiring boards, and 1 has been recommended to be brought before a retiring board with a view to his retirement from active service; 3 medical officers are on ordinary leave of absence after a tour of duty on the remote frontier; leaving 162 medical officers for duty.

The medical officers who have died during the year are as follows:

Lieut. Col. Richard S. Satterlee (retired), at New York City, November 10, 1880.

Lieut. Col. Geo. E. Cooper, assistant medical purveyor, at San Francisco, Cal., April 13, 1881.

Maj. George A. Otis, surgeon, at Washington, D. C., February 23, 1881.

Capt. John W. Brewer, assistant surgeon, at the Government Hospital for the Insane, November 15, 1880.

Lieut. Col. Richard S. Satterlee, chief medical purveyor (retired), entered the service as an assistant surgeon, February 25, 1822; was promoted to surgeon (with the rank of major), July 13, 1832; appointed lieutenant-colonel and chief medical purveyor, July 28, 1866, and retired from active service, as lieutenant-colonel, February 22, 1869. He was

appointed lieutenant-colonel, colonel, and brigadier-general, by brevet September 2, 1864, for diligent care and attention in procuring proper army supplies as medical purveyor, and for economy and fidelity in the disbursement of large sums of money. He served at Fort Niagara, N. Y., to March, 1823; at Detroit, Mich., to September, 1823; at Fort Howard, Wis., to June, 1825; at Fort Mackinac, Mich., to November, 1831; at Fort Winnebago, Wis., to September, 1833; at Fort Howard, Wis., to October, 1837; in Florida, to May, 1838; with troops removing the Cherokee Indians, to September, 1838; at Plattsburg, N. Y., to November, 1840; in Florida, to August, 1842; at Fort Adams, R. I., to October, 1846; with the Army in Mexico, to June, 1848; at Fort Adams, R. I., to October, 1853; accompanied Third United States Artillery to California, in December, 1853, and was wrecked on board the steamship *San Francisco*; attending surgeon and medical purveyor at New York City from March, 1854, to July, 1866; chief medical purveyor of the Army and stationed at New York City from July, 1866, to February 21, 1870, having been directed by the President to remain on duty as chief medical purveyor after his retirement from active service.

Dr. Satterlee was born at Fairfield, Herkimer County, New York, December 6, 1799, and entered the service from Michigan. He was on duty for many years among the Indians of the Northwest, where he became a great favorite and rendered important services. During the Seminole war he was medical director on the staff of General Taylor. During the advance of the Army upon the city of Mexico he served as surgeon-in-chief of General Worth's division, and was mentioned for distinguished services at the battles of Cerro Gordo, Contreras, Churubusco, and especially at the battle of El Molino del Rey. After the occupation of the city of Mexico he became the medical director of the Army, and held that position until peace was declared and the country evacuated. During the War of the Rebellion he was on duty at New York City as the chief medical purveyor of the Army, where his services were of the greatest value. He was a most efficient, faithful, and conscientious officer, as well as a man of the most exemplary character, never losing an opportunity of doing good, and always laboring to promote the welfare of the medical corps of the Army, in which he took the greatest pride and deepest interest.

Lieut. Col. George E. Cooper entered the service as an assistant surgeon August 28, 1847, was promoted to surgeon, with the rank of major, May 21, 1861, and was made assistant medical purveyor, with the rank of lieutenant-colonel, December 2, 1876. He was appointed lieutenant-colonel, by brevet, September 1, 1864, and colonel, by brevet, March 13, 1865, for faithful and meritorious services during the war. He served with the "Army of Invasion" in Mexico from time of appointment to June, 1848; at Jefferson Barracks, Mo., to November, 1848; at Fort Wood, N. Y., to February, 1849; at Eagle Pass (Fort Duncan), Texas, to March, 1853; at Fort Monroe, Va., to May, 1854; with troops en route to New Mexico and at Fort Fillmore, N. Mex., to October, 1859; at Fort Mackinac, Mich., to May, 1861; medical director of the Department of Pennsylvania, to August, 1861; medical purveyor of General T. W. Sherman's expedition, to April, 1862; medical director of the Department of the South, to May, 1862; medical purveyor at Philadelphia, and acting under special instructions of the Secretary of War, to October, 1863; superintendent and inspector of hospitals at Louisville, Ky., to April, 1864; medical director of the Department of the Cumberland, to December, 1865; post surgeon, Fort Monroe, Va., to October, 1870; medical director of the Department of the Columbia, to May,

1874; post surgeon, Benicia Barracks, Cal., to December, 1874; post surgeon, Point San José, Cal., to March, 1877; was assigned to duty at San Francisco under his appointment as assistant medical purveyor, March 13, 1877, on which duty he remained until March 31, 1880, when relieved on account of sickness. Major-General McDowell, commanding the Military Division of the Pacific, in official orders announcing the death of Lieutenant-Colonel Cooper, made the following remarks as to the services of this officer:

Lieutenant-Colonel Cooper served faithfully in the Medical Corps, of which he was a gifted member, for nearly forty years, distinguishing himself in the war with Mexico, and also in the late war for the suppression of the rebellion. His devotion to duty and honesty of purpose commended him to all who knew him, and his loss will be deeply felt, not only by the members of his corps, but by all those who were his military associates.

Maj. George Alexander Otis entered the service as surgeon, Twenty-seventh Massachusetts Volunteers, in September, 1861; was appointed surgeon United States Volunteers, August 30, 1864; assistant surgeon United States Army, February 28, 1866, and was promoted to surgeon, with the rank of major, March 17, 1880; he received the four brevets of lieutenant-colonel of Volunteers, and captain, major, and lieutenant-colonel, United States Army, for meritorious services during the war of the rebellion. While surgeon of the Twenty-seventh Massachusetts Volunteers he served in Virginia, North and South Carolina, on special duty, in charge of the hospital steamer *Cosmopolitan*, in the Department of the South. He was assigned to duty in this office July 22, 1864, and was curator of the Army Medical Museum and in charge of the division of surgical records until his death. Dr. Otis was born at Boston, Mass., November 12, 1830. He graduated with the degree of A. B. and A. M. from Princeton College, and received his degree of M. D. from the University of Pennsylvania in 1850. He visited Europe, prosecuted his professional studies in London and Paris, and returning thence established himself in Springfield, Mass. He was a member of the leading medical societies of America, and corresponding member of similar societies in Europe. With personal observations of the surgical collections abroad, Surgeon Otis brought indefatigable industry and untiring energy to the development of the surgical and anatomical collections of the Army Medical Museum. The compilation of the Surgical Volume of the Medical and Surgical History of the War of the Rebellion has placed him among the most prominent contributors to surgical history, and his death will be deeply deplored, not only by the Medical Corps of the Army, but by the whole medical profession at home and abroad, and which has been evinced, in a measure, by the eulogistic remarks concerning him made during the recent meeting of the International Medical Congress in London.

Capt. John W. Brewer was appointed assistant surgeon November 22, 1862. During the war he was on duty as assistant medical purveyor at Memphis and with the Army operating in the Southwest; since the war he has been stationed at various posts in the Indian Territory and on the Western frontiers. He was appointed major, by brevet, March 13, 1865, for faithful and meritorious services during the war.

JOS. K. BARNES,
Surgeon-General, U. S. A.

REPORT OF THE PAYMASTER-GENERAL.

REPORT
OF
THE PAYMASTER-GENERAL.

WAR DEPARTMENT, PAYMASTER-GENERAL'S OFFICE,
Washington, October 10, 1881.

SIR: In compliance with circular letter from your office of September 16, 1881, I have the honor to inclose my annual report to the Secretary of War, with a synopsis of the same.

Very respectfully, your obedient servant,

N. W. BROWN,
Paymaster-General, U. S. A.

The ADJUTANT-GENERAL *of the Army.*

[First indorsement.]

ADJUTANT-GENERAL'S OFFICE,
Washington, October 11, 1881.

Respectfully submitted to the Secretary of War.

C. McKEEVER,
Acting Adjutant-General.

WAR DEPARTMENT, PAYMASTER-GENERAL'S OFFICE,
Washington, October 10, 1881.

SIR: I have the honor to submit my annual report of the transactions of the Pay Department of the Army, for the fiscal year ending June 30, 1881.

Tabular statements herewith inclosed show in detail the fiscal operations of the department for that year, summarily stated as follows, viz:

RECEIPTS AND DISBURSEMENTS DURING THE FISCAL YEAR ENDING
JUNE 30, 1881.

Balance in hands of paymasters July 1, 1880.....	\$1,379,338 15
Amount received from Treasury	13,292,306 52
Amount received from soldiers' deposits.....	524,112 72
Amount received from paymasters' collections.....	435,210 41
Total to be accounted for.....	15,630,967 80

Accounted for as follows :

Disbursements :

To Regular Army	\$12,966,200 09
To Military Academy	190,259 07
To volunteers, claims of freedmen, &c., on Treasury certificates	570,000 99
	<hr/>
	13,726,460 15
Surplus funds deposited in Treasury	121,173 82
Paymasters' collections deposited in Treasury	434,403 43
Balance in hands of paymasters June 30, 1881	1,348,925 40
	<hr/>

Total accounted for.....\$15,630,967 80

All the requirements of law have, I believe, been faithfully executed, and the Army has been regularly and promptly paid to the close of the year.

The amount received during the year from soldiers' deposits will be seen to be \$524,112.72. The amount received for the previous year was \$477,174.44, an increase of \$46,938.28.

I again respectfully invite attention to the subject of pay to officers of the Army while on leave of absence.

The laws in reference to leaves of absence were passed, severally, on March 3, 1863; June 20, 1864; May 8, 1874; and July 29, 1876. The two latter acts are modifications of the former. Under these laws an officer can receive a leave of absence of thirty days each year—not to be cumulated more than four years—on full pay, and for any time in excess of that he is reduced to *half pay*.

It is considered that the first two laws above cited were enacted as *war measures*, and their effect was no doubt salutary among the large number of new and undisciplined officers gathered from the various walks of life; but the time has fully come, in my judgment, when they should be done away with. Their operation is harsh and very unequal. Very many of the officers are stationed at remote posts in the West, and when a leave is obtained the whole, or a large portion, of the thirty days is often necessarily consumed in travel to any of the Atlantic cities—where most of the officers desire to go—and in returning to their posts.

For any excess of thirty days they are reduced to *half pay*, and this, with the expense attending the journey, is very onerous to them. I therefore respectfully recommend that Congress be asked at the approaching regular session to repeal the laws in question. The extent to which leaves should be granted may safely be left to the recommendation of the department and division commanders and the General of the Army, and the decision of the Secretary of War.

The appropriation act now limits the number of paymasters' clerks to fifty-four. It often happens that the services of additional clerks are much needed in order to prevent delay and injury to public creditors. I would therefore recommend that the number be increased to fifty-six, the two additional ones to be employed by the Paymaster-General, subject to the approbation of the Secretary of War, as in the case of other paymasters' clerks.

In this connection, I beg again to call attention to the inadequate compensation now allowed these clerks, whose duties are important and responsible, requiring an intimate knowledge of figures and considerable business capacity, and often necessitating long and toilsome journeys and exposure to danger. I therefore recommend that Congress be requested to repeal so much of section 1190, Revised Statutes of the United States, as fixes the compensation of paymasters' clerks, and provide that

hereafter said clerks shall be classified and compensation regulated in the same manner as "civilian employes" in the other staff departments of the Army.

I would again urge the necessity of consolidating the appropriations for the pay of the Army, mileage, and general expenses under one title. The amounts to be disbursed under the above titles are, with two or three exceptions, limited by statute law. If the appropriation is in excess of these demands the excess cannot be disbursed, but will be carried by operation of law to the surplus fund, but if the appropriation is not sufficient to meet the demands the excess becomes a valid claim against the United States, and the subject of a deficiency estimate, thus forcing a very worthy class of claimants to a delay that is oftentimes very embarrassing. The interests of the service or economy in expenditures do not therefore demand the separation, while on the other hand there are good reasons for consolidation. Many of the items are estimated upon expenditures of prior years—the best data obtainable. This estimate may be in some cases excessive and in others not sufficient, but in the aggregate the amount appropriated will be sufficient to meet all demands, if the excess in one of them can be used to supply the deficiency in another; and thus a matron in a hospital will not be obliged to go without her pay until Congress meets and makes an appropriation for that purpose, while there is more than sufficient funds to pay the soldier whom she nurses. Again, the division of the appropriations into three heads, for each year, makes it necessary to keep in the hands of each disbursing officer a balance of funds much larger than if there were but one appropriation for each year, as he is obliged to carry a working balance under each appropriation. This, in the case of a limited appropriation, makes it very difficult to properly distribute the funds over so scattered a field as that occupied by paymasters.

Attention is invited to the report of Maj. A. B. Carey, paymaster, U. S. A., hereto appended, under whose immediate charge the payment of claims for bounty, arrears of pay, prize-money, &c., due soldiers, both white and colored, has been made, from which it will be seen that the payments devolved upon this bureau by the act of March 3, 1879, have been prompt, satisfactory, and economical.

The system of identification of claimants and placing the money in their hands seems as perfect as it can be made, and I have no change to recommend.

I am, sir, very respectfully, your obedient servant,

N. W. BROWN,
Paymaster-General, U. S. Army.

The Hon. the SECRETARY OF WAR.

WAR DEPARTMENT, PAYMASTER-GENERAL'S OFFICE,
BOUNTY DIVISION,
Washington, D. C., September 30, 1881.

SIR: In compliance with your instructions, I have the honor to submit the following report for the fiscal year ending June 30, 1881, relative to the payment of claims for bounty, arrears of pay, prize-money, &c., due colored soldiers, sailors, and marines, or their heirs, under joint resolution of Congress of March 29, 1867, and section 2 of an "act making appropriations for sundry civil expenses of the government for the fiscal year ending June 30, 1880, and for other purposes, approved March 3, 1879."

July 1, 1880, there remained in my hands 328 claims received from the Freedman's branch of the Adjutant-General's Office, aggregating \$33,773.78; of these, 23 were paid, aggregating \$2,430.46, leaving on hand June 30, 1881, 305 of these *old claims*, and \$31,343.32 for their payment.

There also remained in my hands at that date, 79 Treasury certificates adjusted under the act of March 3, 1879, aggregating \$7,828.94.

During the fiscal year, 2,209 Treasury certificates were received from the Second Auditor, making a total of 2,288, aggregating \$203,945.58. Of these, 1,936, aggregating \$159,621.93, were paid, leaving on hand June 30, 1881, 352 certificates and \$44,323.65 for their payment.

All claims were prepared for payment in this office, and payments made as follows:

Maj. W. B. Rochester.....	12 claims, aggregating	\$1,354 97
Maj. N. Vedder	66 claims, aggregating.....	7,774 14
Maj. G. W. Candee.....	493 claims, aggregating.....	72,548 85
Maj. A. B. Carey.....	1,388 claims, aggregating.....	80,374 43
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Total.....	1,959 claims, aggregating.....	\$162,052 59

One hundred and forty-nine claims, aggregating \$15,503.80 were paid through the Post-Office Department by post-office money orders since March 3, 1881, the date on which the appropriation for the expense of these payments became available.

The total expense of all these payments during the year was \$3,275.56, of which \$1,950.05 was from the appropriation for the support of the Army for the fiscal year ending June 30, 1881, and \$1,325.51 from the \$5,595.02 appropriated by the act of March 3, 1881, which left a balance of \$4,270.51 available for the fiscal year ending June 30, 1882.

The cost to the government in paying these claims for the last fiscal year was a trifle over 2 per cent. of the amount disbursed, or \$1.67 for each claim paid.

In addition to the claims of colored soldiers paid as above, there has been paid from this office, by check, to white claimants, 3,925 Treasury certificates; aggregating \$432,506.05.

Very respectfully, your obedient servant,

A. B. CAREY,
Paymaster, U. S. A.

Brig. Gen. N. W. BROWN,
Paymaster-General, U. S. Army.

Statement of the account of the Pay Department with the several appropriations subject to its control during the fiscal year ending June 30, 1881.

In account with the Treasury.					
Appropriations.	Balance in the Treasury July 1, 1880.	Amount of appropriations.	Unexpended balances deposited by paymasters.	Collections deposited by paymasters.	Repayment in settlement of accounts.
					Total.
Pay of the Army, 1881		\$11,548,601 55	\$6,862 50	\$219,857 22	\$11,775,352 27
Mileage, 1881		240,000 00		840 56	240,840 56
General expenses, 1881		551,198 45		2,201 73	553,400 18
Pay of the Military Academy, 1881		219,594 28			219,594 28
Pay, mileage, &c., of the Army, 1880	\$259,932 58		93,061 51	92,174 71	445,168 80
Pay of the Military Academy, 1880	1,292 33	260 04	5,709 19	83 32	7,344 88
Pay, mileage, &c., of the Army, 1879	782,457 33		4,880 96	1,846 38	789,184 67
Pay of the Military Academy, 1879	7,972 46				7,972 46
Pay, mileage, &c., of the Army, 1878 and prior years		13,314 92	8,475 77	2,894 77	25,921 66
Pay of the Military Academy, 1878	562 50				562 50
Pay, mileage, &c., of the Army, 1877 and prior years		9,642 85			9,642 85
Pay of two and three years' volunteers, 1871 and prior years		140,134 00		149 20	151,283 34
Pay of volunteers					47 30
Traveling expenses First Michigan Cavalry		198 50			198 50
Traveling expenses of California and Nevada volunteers		187 50			187 50
Extra pay of officers and men who served in the Mexican war		3,240 00			3,240 00
Pay of volunteers Mexican war		183 86			183 86
Pay of mounted riflemen volunteers, serving General John C. Frémont in 1846		232 87			232 87
Pay of Florida volunteers		765 00			765 00
Bounty to volunteers and regulars					31 64
Expenses under reconstruction acts				12 50	86 15
Bounty to volunteers, widows, and legal heirs, 1871 and prior years		331,620 68	1,229 54	88 00	340,846 07
Military Academy allowance to graduating class 1879-'80		3,136 32			3,136 32
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers		5,166 66			5,166 66
Bounty act July 28, 1866		88,192 58		190 00	95,290 00
TRANSFER ACCOUNT.					
Pay of two and three years' volunteers		500 27			600 27
Bounty to volunteers, widows, and legal heirs		175 00			200 00
Pay, &c., of the Army, 1878 and prior		511 90			681 40
Army paymasters' collections					

Statement of the account of the Pay Department with the several appropriations subject to its control during the fiscal year ending June 30, 1881—Cont'd.

Appropriations.	In account with the Treasury.						Total.
	Balance in the Treasury July 1, 1880.	Amount of appropriations.	Unexpended balances deposited by paymasters.	Collections deposited by paymasters.	Repayment in settlement of accounts.		
Appropriations.	\$2, 199 44	\$1, 900 00	\$3, 413 42				\$4, 099 41
							3, 413 42
		5, 595 02					5, 595 02
COLORED CLAIMS.							
Collection and payment of bounty, &c., due colored soldiers and sailors, 1879							
Collection and payment of bounty, &c., due colored soldiers and sailors, 1880							
Collection and payment of bounty, &c., due colored soldiers and sailors, 1881, 1882							
Pay of two and three years' volunteers, 1879, 1880							
Pay, bounty, &c., due colored soldiers							
Commutation of rations due colored soldiers							
Pay, bounty, and prize money due colored sailors, &c.							
	1, 054, 416 61	13, 164, 352 25	123, 632 89	\$320, 338 39	\$27, 529 70		14, 690, 269 84

Appropriations.	In account with the Treasury.						Total balances June 30, 1881.
	Amount drawn by Requisition of Pay Department.	Amount drawn by Requisition of War Department.	Amount covered in act of July 20, 1874.	Total.	Balances in the Treasury June 30, 1880.	Balance in hands of paymasters June 30, 1881.	
Pay of the Army, 1881	\$11, 701, 979 36	\$68, 870 48		\$11, 770, 849 84	\$4, 502 43	\$1, 130, 189 76	\$1, 134, 692 19
				239, 500 00	1, 340 56	15, 562 88	16, 903 44
				544, 200 00	9, 200 18	55, 243 43	64, 443 61
				188, 000 00	31, 594 28	21, 714 77	53, 309 05
				28, 000 00	367, 647 53	21, 871 09	389, 518 62
Pay, mileage, &c., of the Army, 1880				77, 521 27	7, 083 69		7, 083 69
Pay of the Military Academy, 1881							
Pay, mileage, &c., of the Military Academy, 1880							

Pay, mileage, &c., of the Army, 1879	5,000 00	3,133 13	\$781,051 54	789,184 67	.....	1,158 73	1,158 73
Pay of the Military Academy, 1879 .....	.....	477 79	7,494 67	7,972 46	.....	.....	.....
Pay, mileage, &c., of the Army, 1878 and prior years	4,516 15	8,798 77	12,606 74	25,921 66	.....	275 21	75 21
Pay of the Military Academy, 1878 .....	.....	562 50	.....	562 50	.....	.....	.....
Pay, mileage, &c., of the Army, 1877 and prior years	7,694 17	1,948 68	.....	9,642 85	.....	.....	.....
Pay of two and three years' volunteers, 1871 and prior years	131,774 26	8,359 74	11,149 34	151,283 34	.....	11,289 48	11,289 48
Pay of volunteers .....	.....	.....	47 30	47 30	.....	.....	.....
Traveling expenses First Michigan Cavalry	198 50	.....	.....	198 50	.....	.....	.....
Traveling expenses of California and Nevada volunteers	187 50	.....	.....	187 50	.....	.....	.....
Extra pay of officers and men who served in the Mexican war	3,000 00	240 00	.....	3,240 00	.....	1,161 64	1,161 64
Pay of volunteers Mexican war	183 86	.....	.....	183 86	.....	.....	.....
Pay of mounted riflemen volunteers, serving General John C. Frémont in 1846	232 87	.....	.....	232 87	.....	.....	.....
Pay of Florida volunteers	765 00	.....	.....	765 00	.....	.....	.....
Bounty to volunteers and regulars .....	.....	.....	31 64	31 64	.....	.....	.....
Expenses under reconstruction acts .....	.....	.....	86 15	86 15	.....	.....	.....
Bounty to volunteers, widows, and legal heirs, 1871 and prior years	331,520 68	100 00	9,225 39	340,846 07	.....	45,366 09	45,366 09
Military Academy allowances to graduating class 1879-80	3,136 32	.....	.....	3,136 32	.....	.....	.....
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers	5,166 66	.....	.....	5,166 66	.....	5,000 00	5,000 00
Bounty act July 28, 1866	95,000 00	290 00	.....	95,290 00	.....	6,655 21	6,655 21
TRANSFER ACCOUNT.							
Pay of two and three years' volunteers .....	.....	600 27	.....	600 27	.....	.....	.....
Bounty to volunteers, widows, and legal heirs .....	.....	200 00	.....	200 00	.....	.....	.....
Pay, &c., of the Army, 1878 and prior, .....	.....	681 40	.....	681 40	.....	.....	.....
Army paymasters' collections .....	.....	.....	.....	.....	.....	806 98	806 98
COLORED CLAIMS.							
Collection and payment of bounty, &c., due colored soldiers and sailors, 1879 .....	.....	.....	4,099 41	4,099 41	.....	.....	.....
Collection and payment of bounty, &c., due colored soldiers and sailors, 1880 .....	.....	.....	1,495 61	1,495 61	1,917 81	.....	1,917 81
Collection and payment of bounty, &c., due colored soldiers and sailors, 1881, 1882	2,000 00	.....	.....	2,000 00	3,595 02	674 49	4,269 51
Pay of two and three years' volunteers, 1879, 1880 .....	.....	.....	.....	.....	.....	612 32	612 32
Pay, bounty, &c., due colored soldiers .....	.....	.....	.....	.....	.....	28,926 53	28,926 53
Commutation of rations due colored soldiers .....	.....	.....	.....	.....	.....	396 25	396 25
Pay, bounty, and prize money due colored sailors, &c. ....	.....	.....	.....	.....	.....	2,020 54	2,020 54
.....	13,292,306 52	143,784 03	827,287 79	14,263,378 34	426,891 50	1,348,925 40	1,775,816 90

N. W. BROWN, Paymaster-General, U. S. Army.

Appropriations.	In account with the Treasury.					Total.
	Balance in the Treasury July 1, 1880.	Amount of appropriations.	Unexpended balances deposited by paymasters.	Collections deposited by paymasters.	Repayment in settlement of accounts.	
Appropriations.	\$2, 199 44	\$1, 900 00	\$3, 413 42			\$4, 099 41
						3, 413 42
		5, 595 02				5, 595 02
COLORED CLAIMS.						
Collection and payment of bounty, &c., due colored soldiers and sailors, 1879						
Collection and payment of bounty, &c., due colored soldiers and sailors, 1880						
Collection and payment of bounty, &c., due colored soldiers and sailors, 1881, 1882						
Pay of two and three years' volunteers, 1879, 1880						
Pay, bounty, &c., due colored soldiers						
Commutation of rations due colored soldiers						
Pay, bounty, and prize money due colored sailors, &c.						
	1, 054, 416 61	13, 164, 352 25	123, 632 89	\$320, 338 39	\$27, 529 70	14, 690, 269 84

Appropriations.	In account with the Treasury.					Total balance June 30, 1881.
	Amount drawn by Regulation of Pay Department.	Amount drawn by Regulation of War Department.	Amount covered in act of July 20, 1874.	Total.	Balance in hands of paymasters June 30, 1881.	
Pay of the Army, 1881	\$11, 701, 979 36	\$68, 870 48		\$11, 770, 849 84	\$4, 502 43	\$1, 134, 092 19
	239, 500 00			239, 500 00	1, 340 56	16, 903 44
	544, 200 00			544, 200 00	9, 200 18	64, 443 61
	188, 000 00			188, 000 00	81, 594 28	53, 309 05
	26, 000 00	49, 531 27		77, 521 27	367, 647 53	389, 518 62
Pay, mileage, &c., of the Army, 1880	261 19			261 19	7, 993 69	7, 993 69
Pay of the Military Academy, 1880						
Pay of the Military Academy, 1881						
General expenses, 1881						
Pay of the Military Academy, 1881						
Pay, mileage, &c., of the Army, 1880						
Pay of the Military Academy, 1880						

Pay, mileage, &c., of the Army, 1879	5, 000 00	3, 133 13	\$781, 051 54	789, 184 67	.....	1, 158 73	1, 158 73
Pay of the Military Academy, 1879		477 79	7, 494 67	7, 972 46	.....	
Pay, mileage, &c., of the Army, 1878 and prior years	4, 516 15	8, 798 77	12, 606 74	25, 921 66	.....	275 21	75 21
Pay of the Military Academy, 1878		562 50		562 50	.....	
Pay, mileage, &c., of the Army, 1877 and prior years	7, 694 17	1, 948 68		9, 642 85	.....	
Pay of two and three years' volunteers, 1871 and prior years	131, 774 26	8, 359 74	11, 149 34	151, 283 34	.....	11, 289 48	11, 289 48
Pay of volunteers			47 30	47 30	.....	
Traveling expenses First Michigan Cavalry	198 50			198 50	.....	
Traveling expenses of California and Nevada volunteers	187 50			187 50	.....	
Extra pay of officers and men who served in the Mexican war	3, 000 00	240 00		3, 240 00	.....	1, 161 64	1, 161 64
Pay of volunteers Mexican war	183 86			183 86	.....	
Pay of mounted riflemen volunteers, serving General John C. Frémont in 1846	232 87			232 87	.....	
Pay of Florida volunteers	765 00			765 00	.....	
Bounty to volunteers and regulars			31 64	31 64	.....	
Expenses under reconstruction acts			86 15	86 15	.....	
Bounty to volunteers, widows, and legal heirs, 1871 and prior years	331, 520 68	100 00	9, 225 39	340, 846 07	.....	45, 366 09	45, 366 09
Military Academy allowances to graduating class 1879-80	3, 136 32			3, 136 32	.....	
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers	5, 166 66			5, 166 66	.....	5, 000 00	5, 000 00
Bounty act July 28, 1868	95, 000 00	290 00		95, 290 00	.....	6, 655 21	6, 655 21
TRANSFER ACCOUNT.							
Pay of two and three years' volunteers		600 27		600 27	.....	
Bounty to volunteers, widows, and legal heirs		200 00		200 00	.....	
Pay, &c., of the Army, 1878 and prior		681 40		681 40	.....	
Army paymasters' collections .....					.....	806 98	806 98
COLORED CLAIMS.							
Collection and payment of bounty, &c., due colored soldiers and sailors, 1879			4, 099 41	4, 099 41	.....	
Collection and payment of bounty, &c., due colored soldiers and sailors, 1880			1, 495 61	1, 495 61	.....	1, 917 81	1, 917 81
Collection and payment of bounty, &c., due colored soldiers and sailors, 1881, 1882	2, 000 00			2, 000 00	.....	674 49	4, 269 51
Pay of two and three years' volunteers, 1879, 1880 .....					.....	612 32	612 32
Pay, bounty, &c., due colored soldiers .....					.....	28, 926 53	28, 926 53
Commutation of rations due colored soldiers .....					.....	396 25	396 25
Pay, bounty, and prize money due colored sailors, &c. ....					.....	2, 020 54	2, 020 54
	13, 292, 306 52	143, 784 03	827, 287 79	14, 263, 378 34	426, 891 50	1, 348, 925 40	1, 775, 816 90

N. W. BROWN, Paymaster-General, U. S. Army.

Statement showing the balances in the hands of each of the disbursing officers of the Pay Department on the 1st of July, 1880; the amount remitted to each from the Treasury, or turned over by other agents, during the fiscal year ending June 30, 1881; the amounts accounted for by accounts and vouchers of expenditures, or by transfers or replacements in the Treasury, and the balances remaining in the hands of paymasters to be accounted for in the next fiscal year.

Name and rank	Balance in hands of paymasters July 1, 1880	Remitted from Treasury in the year ending June 30, 1881	Amounts received from paymasters	Amount of soldiers' deposits	Army collections	Total amount received and to be accounted for	Surplus funds re-placed in the Treasury	Army paymasters' collections deposited	Expenditures	Amounts transferred to paymasters	Actual balance in hands of paymasters June 30, 1881	Total amount accounted for
COLONELS AND ASSISTANT PAYMASTERS-GENERAL.												
McClure, Daniel	\$123,581 72	\$123,000 00	\$1,250 00			\$247,831 72		\$247,831 72	\$179,804 35	\$247,831 72		\$247,831 72
Woods, Samuel		411,000 00	77,541 21	\$285 00		489,440 80		300,831 96		300,831 96		489,440 80
Felbiger, George L.		45,000 00	36,175 29			159,263 80		143 95	29,864 55	129,455 30		159,263 80
LIEUTENANT-COLONELS AND DEPUTY PAYMASTERS-GENERAL.												
Larned, Chas. T.		2,140,251 19	246,546 25	2,448 50		2,389,255 04	6,166 04	2,389,255 04	433,806 88	1,876,073 92	\$73,643 10	2,389,133 06
Smith, Rodney		211,000 00	180,856 57	8,532 80		403,389 37	176 78	5,673 27	217,265 18	202,481 38	37,924 79	463,823 35
MAJORS AND PAYMASTERS.												
Fulton, J. H.	71,510 86	409,000 00	11,028 49	1,460 00		491,999 35	13,000 00	1,389 10	78,382 12	401,627 32		494,408 44
Patterson, J. R. M.			281,749 37	3,724 00		285,473 37		7,359 05	220,385 40	62,801 00	2,210 28	292,836 42
Rucker, W. H.		1,611,300 00	594,369 87	5,205 00		1,611,300 00	66,176 07	2,638 76	256,247 21	1,453,504 58	126,430 61	1,946,186 23
Johnston, W. H.	31,451 99	274,000 00	67,368 93	9,749 30		382,569 22	174,815 02	6,870 29	174,815 02	172,185 46	35,312 20	389,449 50
Gibbons, W. R.	5,671 42	1,591,500 00	248,747 80	20,824 76		1,866,143 98	2,141 22	16,828 53	768,886 90	1,075,057 78	81,470 10	1,984,583 51
Aprague, C. J.	173,233 60	526,000 00	544,532 04	3,448 75		1,253,214 39		6,586 09	685,250 70	561,737 26	139 43	1,253,814 48
Rochester, W. R.	11,409 23	491,000 00	35,134 74	2,263 06		542,706 78	1,250 67	2,509 15	212,779 21	308,451 68	17,707 09	542,706 78
Reese, H. B.	13,666 02	278,500 00	362,221 52	10,306 50		708,213 15		12,487 11	350,618 13	301,516 74	43,301 17	708,213 15
Vedder, Nicholas	1,006 49		186,419 70	4,134 02		189,755 89		3,585 64	172,963 83	6,189 18	12,007 20	194,765 89
Smith, William	43,878 43	912,100 00	55,947 96	4,580 45		1,015,741 78		2,207 92	697,698 50	779,289 13	40,184 21	1,018,741 78
Tennell, C. M.	53,848 10	1,079,500 00	266,854 68	1,094 95		1,440,309 67	175 04	4,344 24	256,153 10	911,016 73	74,620 88	1,416,708 97
Stanton, T. H.	47,000 13	1,067,000 00	98,283 39	17,978 21		1,220,613 01	5,510 46	0,293 28	258,894 60	814,636 78	40,477 89	1,220,613 01
Glenn, George E.			116,430 17	1,894 00		121,301 22		4,416 80	99,651 51	10,136 34	4,177 57	121,301 22
Clarke, R. D.	131 25		179,328 14	2,328 08		181,787 47		2,341 18	173,037 18	6,649 18		181,787 47
Nelson, J. H.		4,079 86	140,006 06	208 00		144,393 92	4,982 66	2,674 84	140,302 04	54,815 38	2,416 86	144,393 92

Wingard, C. W.	35,023 51				226,534 79	10,979 00	9,141 11			229,071 66	16,919 91	26,345 73	281,678 41
Canby, J. P.	2,871 01	228,000 00			194,633 98	18,345 00	7,983 70			194,509 18	179,057 20	68,293 61	451,843 69
Hall, P. P. G.	13,321 21				617,082 62	3,031 00	11,349 78			622,316 60	7,941 04	3,177 19	644,784 61
Candee, George W.	107,994 71	70,000 00			391,420 60	9,128 85	9,051 22			337,860 62	236,152 49	1,308 98	587,595 38
Brooke, E. H.	7,544 35				391,451 28	6,386 74	15,783 21			375,719 23	11,201 28	18,461 86	421,165 58
Dewey, I. O.	1,971 45				361,266 37	1,720 00	5,101 48			349,563 96	15,311 49	82 37	370,059 30
Carey, A. B.		636,375 97			221,295 10		991 43			590,593 03	159,083 76	103,038 57	858,662 50
Bridgman, Frank	11,428 55	310,700 00			44,738 44	8,640 72	2,366 63			333,569 77	27,977 20	14,020 74	377,874 34
Coxe, F. M.	6,387 38	140,000 00			156,528 58	10,510 75	8,372 72			137,606 55	149,422 94	26,397 22	321,799 43
Bates, A. E.	59,201 27				262,561 30	15,619 80	12,496 01			239,691 83	84,853 79	12,836 75	349,878 38
Willard, J. P.					40,026 00	3,375 00	2,294 42			34,045 25	26 00	9,329 75	45,695 42
Wilson, C. I.	15,000 00	239,000 00			386,616 94	8,982 90	8,493 45			311,324 33	337,994 99	280 52	658,093 29
Eckels, W. H.	6,609 56				191,315 29	16,074 00	9,122 68			190,535 15	21,462 87	2,000 83	223,121 53
Isaacs, J. E.	47,744 24				403,238 72	7,089 75	5,442 69			147,622 47	255,115 08	55,285 16	463,515 40
Roche, J. R.	14,803 24				219,631 09	8,810 00	10,466 18			179,649 15	52,232 85	11,362 33	253,710 51
Towar, A. S.	25,603 91	110,000 00			300,441 28	16,660 29	13,890 85			295,704 56	123,795 14	33,202 17	406,506 33
Towler, R. H.	49,603 84	45,000 00				676 00	1,170 11			16,432 45	78,847 39	806 98	96,449 95
dier, W. M.	26,992 61				280,693 38	23,091 71	12,932 65			284,545 37	21,944 62	24,287 11	343,709 75
Brodhead, J. A.	2,425 98				265,282 65	15,088 46	10,512 49			166,233 23	14,897 53	41,666 30	233,309 58
Arthur, William	4,037 25				276,705 54	23,016 00	12,742 35			278,545 42	24,829 18	384 19	316,501 14
Watson, J. R.	6,892 91				192,311 49	22,741 84	14,273 84			211,475 09	10,468 64	2 51	236,220 08
Thomas, H. G.					158,596 60	11,590 00	7,015 71			119,650 23	14,810 27	35,726 10	177,202 31
Sharp, Alex.	32,453 76				238,665 73	11,010 16	10,183 03			240,674 92	20,649 83	20,204 90	291,712 68
Keefe, J. B.	8,850 88				188,364 96	13,922 49	10,184 76			193,207 14	8,149 90	9,781 29	221,323 09
Wham, J. W.	52,332 41				185,166 56	10,475 15	11,512 31			182,909 60	40,261 37	24,803 15	259,486 43
Sniffin, C. C.	12,062 65	129,000 00			172,365 79	13,501 40	14,985 06			241,286 10	85,643 74		341,914 90
Smith, T. C. H.	46,040 63	209,000 00			394,480 67	32,809 11	30,140 94			563,033 43	40,245 00	79,109 47	712,531 35
Baird, George W.	10,151 69				294,224 00	28,948 29	22,251 11			292,940 57	40,383 41	2,832 91	355,575 09
Larned, D. R.	7,781 38				135,778 89	6,911 00	3,401 35			129,168 11	18,470 25		153,872 62
Robinson, George F.	25,707 26				238,718 27	17,844 37	15,230 43			241,029 37	41,240 53		297,500 33
Dodge, F. S.	28,363 21				230,934 55	22,982 84	15,089 33			241,833 71	5,915 04	34,541 85	297,379 93
McClure, Charles					161,092 99	13,255 75	9,893 65			150,344 38	15,013 08	8,991 28	184,152 39
Witcher, John S.					94,354 97	7,628 25	3,831 44			74,313 77	22,726 51	4,125 30	105,814 66
Whipple, Chas. H.					30,191 58	1,143 00	666 86			17,271 67		14,062 91	32,001 44
Comegys, W. H.					26,940 25	1,250 00	1,147 05			22,765 58	3,200 00	2,024 67	29,337 30
Bash, D. N.					83,000 00	265 00	449 92			29,855 66		53,409 34	83,714 92
Total	1,379,338 15	13,292,306 52	11,412,960 36	524,112 72	435,210 41	27,043,928 16	121,178 82	434,403 43	13,726,460 15	11,412,960 26	1,348,925 40	27,043,928 16	

Dismissed January 31, 1881.

Died August 8, 1880.

\$20,000 reported as stolen on or about January 17, 1880.

N. W. BROWN,
Paymaster-General, U. S. Army.

Statement by appropriations of approved and suspended disbursements in paymasters' accounts rendered during the fiscal year ending June 30, 1881, showing also the balance of suspensions remaining June 30, 1880, amount removed during the year, and the balance remaining June 30, 1881.

Title of appropriations.	Disbursements.		Suspensions.		
	Total.	Approved.	Suspended.	Amount of suspensions removed during fiscal year ending June 30, 1881.	Amount of suspensions remaining on books June 30, 1881.
				Total suspensions.	
Pay of the Army, 1882	\$7,089 22	\$7,089 22			
General expenses, 1882	2,016 67	2,016 67			
Pay of the Army, 1881	11,077,107 67	11,967,727 47	\$9,380 20	\$9,380 20	\$5,916 40
Mileage, 1881	224,047 52	221,328 64	2,518 88	2,518 88	1,591 46
General expenses, 1881	488,424 26	485,297 36	3,126 90	3,126 90	1,130 96
Pay of the Military Academy, 1881	166,285 23	166,285 23			
Pay, traveling, and general expenses of the Army, 1880	1,156,273 69	1,154,064 78	1,011 81	10,510 24	5,418 31
Pay of the Military Academy, 1880	23,973 84	23,973 84		92 32	83 32
Pay, traveling, and general expenses of the Army, 1879	11,238 06	11,224 60	13 46	4,769 99	1,543 64
Pay of the Military Academy, 1879				23 00	23 00
Pay, traveling, and general expenses of the Army, 1878				2,152 53	82 37
Pay, traveling, and general expenses of the Army, 1877				1,286 07	130 14
Pay, traveling, and general expenses of the Army, 1876				992, 86	6 32
Pay, traveling, and general expenses of the Army, 1875				1,212 83	161 93
Pay, traveling, and general expenses of the Army, 1874				550 24	1 47
Pay of the Army, 1873				657 52	7 67
Mileage, 1873				3 00	3 00
Pay of the Army, 1872				159 08	7 81
General expenses, 1872				44 45	44 45
Pay of the Army prior to July 1, 1871	305,730 89	305,730 89		206 37	1 01
Bounty to volunteers, their widows, and legal heirs, 1871 and prior years	124,489 65	124,489 65			
Pay of two and three years' volunteers, 1871 and prior years	114,901 93	114,901 93			
Bounty act of July 28, 1866	765 00	765 00			
Pay of Florida volunteers	4,240 94	4,240 94			
Pay of the Army, 1878 and prior years	7,682 05	7,682 05			
Pay of the Army, 1877 and prior years	100 00	100 00			
Bounty to volunteers, their widows and legal heirs, reappropriated prior to May 3, 1878	2,683 11	2,683 11			
Extra pay to officers and men who served in the Mexican war	106 06	106 06			
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers	139 75	139 75			
Pay of the Army, 1874					

Pay, bounty, &c., due colored soldiers.....	2, 243 74	2, 243 74	.....	.....	.....
Collection and payment bounty, &c., 1879 and 1880.....	4 50	4 50	.....	.....	.....
Collection and payment bounty, &c., 1881 and 1882.....	1, 325 51	1, 325 51	.....	.....	.....
Pay of two and three years' volunteers, colored claims, 1879 and 1880.....	1, 580 35	1, 580 35	.....	.....	.....
Commutation of rations due colored soldiers.....	55 25	55 25	.....	.....	.....
Pay, bounty, prize-money, &c., due colored sailors, &c.....	2 61	2 61	.....	.....	.....
Military Academy allowance to graduating class, 1879-'80.....	3, 136 32	3, 136 32	.....	.....	.....
Pay of volunteers, Mexican war.....	183 86	183 86	.....	.....	.....
Traveling expenses California and Nevada Volunteers.....	187 50	187 50	.....	.....	.....
Traveling expenses First Michigan Cavalry.....	198 50	198 50	.....	.....	.....
Pay of mounted riflemen under General Fremont, in 1846.....	232 87	232 87	.....	.....	.....
	13, 726, 460 15	13, 709, 808 90	16, 651 25	21, 036 43	37, 687 68
					13, 854 15
					23, 833 53

N. W. BROWN,
Paymaster-General, U. S. A.

PUBLICATION OF WAR RECORDS.

REPORT OF PUBLICATION OF WAR RECORDS.

WAR DEPARTMENT, WAR RECORDS OFFICE,
Washington, D. C., October 12, 1881.

To the SECRETARY OF WAR:

SIR: I have the honor to report progress in the publication of the military records of the War of the Rebellion.

The examination of the files for 1861, 1862, and 1863, both Union and Confederate, and of the files of the Union Armies for 1864 and 1865, has been completed, and the necessary copying from them is nearly finished. Many of the Confederate files for 1864 and 1865 have also been examined. A few of the book records for 1863 and most of those for later years, of both armies, are yet to be searched.

The War Department agent for the collection (by gift or loan) of Confederate documents continues to be successful in obtaining valuable records from Confederate officers or their heirs. The more extensive contributions of that nature received since my last report have been from the collections of Generals E. P. Alexander, S. G. French, Johnson Hagood, Bradley T. Johnson, James H. Lane, T. T. Munford, J. C. Tappan, E. C. Walthall, and W. H. C. Whiting, and Colonels I. W. Avery and Charles Marshall.

The "Polk Papers" have been donated to the Government by Dr. William M. Polk, now of New York City.

By the act of June 16, 1880, Congress authorized the publication of 10,000 copies of each volume of the records that might be ready during the fiscal year ending June 30, 1881. Under that act seven volumes—five of Series I and one each of Series III and IV—were sent to the Public Printer. Of Series I, Vols. I and II have been given to the public. Vol. III, so far as this office is concerned, has been completed, and it will doubtless be delivered by the Public Printer before Congress assembles. The text of Vols. IV and V has been stereotyped and they are being indexed. The text of Vols. I, Series III and IV, has also been stereotyped.

Under the current appropriation Vols. VI and VII of Series I have been sent to the Public Printer; Vols. VIII, IX, and X are ready for him, and Vols. XI to XVI will be arranged during the current fiscal year. With proper regard for accuracy the volumes cannot be published more rapidly until the examination of the records is completed.

The contents of Vols. I to XI, Series I, are as follows:

VOLUME I.

Chapter I. Operations in Charleston Harbor, South Carolina. December 20, 1860–April 14, 1861.

Chapter II. The secession of Georgia. January 3–26, 1861.

Chapter III. The secession of Alabama and Mississippi. January 4–20, 1861.

Chapter IV. Operations in Florida. January 6–August 31, 1861.

Chapter V. The secession of North Carolina. January 9–May 20, 1861.

Chapter VI. The secession of Louisiana. January 10–February 19, 1861.

Chapter VII. Operations in Texas and New Mexico. February 1–June 11, 1861.

Chapter VIII. Operations in Arkansas, the Indian Territory, and Missouri. February 7–May 9, 1861.

VOLUME II.

Chapter IX. Operations in Maryland, Pennsylvania, Virginia, and West Virginia. April 16–July 31, 1861.

VOLUME III.

Chapter X. Operations in Missouri, Arkansas, Kansas, and Indian Territory. May 10–November 19, 1861.

VOLUME IV.

Chapter XI. Operations in Texas, New Mexico, and Arizona. June 11, 1861–February 1, 1862.

Chapter XII. Operations in Kentucky and Tennessee. July 1–November 19, 1861.

Chapter XIII. Operations in North Carolina and Southeastern Virginia. August 1, 1861–January 11, 1862.

VOLUME V.

Chapter XIV. Operations in Maryland, Northern Virginia, and West Virginia. August 1, 1861–March 17, 1862.

VOLUME VI.

Chapter XV. Operations on the coasts of South Carolina, Georgia, and Middle and East Florida. August 21, 1861–April 11, 1862.

Chapter XVI. Operations in West Florida, Southern Alabama, Southern Mississippi, and Louisiana. September 1, 1861–May 12, 1862.

VOLUME VII.

Chapter XVII. Operations in Kentucky, Tennessee, North Alabama, and Southwest Virginia. November 19, 1861–March 4, 1862.

VOLUME VIII.

Chapter XVIII. Operations in Missouri, Kansas, Arkansas, and the Indian Territory. November 19, 1861–April 10, 1862.

VOLUME IX.

Chapter XIX. Operations in Southeastern Virginia. January 11–March 17, 1862.

Chapter XX. Operations in North Carolina. January 11–August 20, 1862.

Chapter XXI. Operations in Texas, New Mexico, and Arizona. February 1–September 20, 1862.

VOLUME X.

Chapter XXII. Operations in Kentucky, Tennessee, North Mississippi, North Alabama, and Southwest Virginia. March 4–June 10, 1862.

VOLUME XI.

Chapter XXIII. The Peninsula Campaign, Virginia, and operations immediately connected therewith. March 17–September 2, 1862.

Messrs. Kirkley, of the Adjutant-General's Office, and Tasker, of the War Department, continue to render zealous and most valuable assistance to the work under my charge. In so doing they perform much extra labor, for which, in my judgment, they should receive extra compensation.

HRII:FWA

Very respectfully, your obedient servant,

ROBERT N. SCOTT,
Brevet Lieutenant-Colonel, U. S. A.

**REPORT ON MILITARY PRISON, FORT
LEAVENWORTH, KANSAS.**

REPORT
ON
MILITARY PRISON, FORT LEAVENWORTH, KANSAS.

**GOVERNOR'S OFFICE,
UNITED STATES MILITARY PRISON,
*Fort Leavenworth, Kans., July 21, 1881.***

**To the ADJUTANT-GENERAL, UNITED STATES ARMY,
*Washington, D. C. :***

(Through headquarters Department of the Missouri, Fort Leavenworth, Kans.)

SIR: I have the honor to transmit herewith annual reports of the quartermaster, surgeon, and chaplain connected with the prison for the fiscal year ending June 30, 1881. I also inclose a tabular statement of labor performed, prisoners received, discharged, &c.

During the past year improvements have been made in and near the prison as exhibited by the following details:

Cottage quarters No. 6, three rooms, each 16 by 16 feet, one story, frame. South extension of shop building, first and second story, 24 by 46 feet, brick, and slate roof. A stable connected with the quarters for quartermaster's clerks, 16 by 36 feet, one and one-half story, frame.

An addition of one room, 12 by 16 feet, to quarters occupied by the prison farmer. There was also built 1,620 lineal feet of board fence around cottage quarters; and nearly two miles of fencing inclosing the prison farm, and which was destroyed by high water, was rebuilt of old material.

An additional set of cottage quarters, No. 7, of four rooms, each 16 by 16 feet, was erected, and is nearly completed.

A new floor of hard pine was laid on the first floor of prison building No. 2, dimensions 37 by 97 feet.

There has been built 186 feet of prison wall, completing the girth of the prison, making a total of 2,022 feet; 381 $\frac{3}{4}$ feet of coping has been laid thereon.

Work in the shops has progressed very favorably, the only difficulty experienced being in the first quarter, owing to the failure of the Quartermaster's Department to furnish stock in time for the manufacture of boots and shoes, which caused a loss of 23 $\frac{1}{2}$ days' labor in that department.

During the year there have been manufactured 34,163 pairs of boots, b. s.; 25,944 pairs of shoes, b. s.; 4,356 corn brooms; 1,656 barrack chairs; 110 chair arms; 110 chair rungs; 220 chair bolts; 1,623 packing boxes for boots, shoes, and harness; and 80 crates for packing chairs. Also 100 complete sets of 4-mule ambulance harness, and 75 complete sets of 6-mule Army-wagon harness.

Besides the above-enumerated articles, all doors, sash, &c., as well as the necessary repairs to buildings, &c., were made by prison labor. During the year there has been 2,970 bushels of lime burned and used in the building of wall, prison-building extension, sanitary purposes, &c.

In the shoe-shop care has been taken to save all scrap leather, and during the year there has been sold 48,713 pounds, realizing the sum of \$2,150.77, which amount has been turned into the United States Treasury on account of miscellaneous receipts.

During the past year the prison farm has yielded 2,600 bushels of potatoes, 460 bushels of turnips, 3,900 heads of cabbage, 700 bushels of corn, 176 bushels of onions, 650 bushels of tomatoes, and a quantity of other vegetables for immediate consumption.

This year we have under cultivation about 50 acres, planted as follows: 29 acres in potatoes, 12 acres in corn, 3 acres in tomatoes, and 6 acres with a variety of vegetables, such as onions, beets, carrots, parsnips, &c.

Owing to the backwardness of the season, and the overflow of the Missouri River (which inundated the entire farm), the crops will not be as large as last year, and will be late on account of having to be replanted.

The fund of prison earnings has not been increased during the fiscal year, and the sum of \$6,730.42 still remains deposited in the First National Bank, Leavenworth, Kans.

The work performed for the Quartermaster's Department during the past year has been as follows: 30,241 days' skilled labor, 19,524 days' unskilled labor.

The following will show the disbursements of funds appropriated for the support of the prison for the fiscal year:

Appropriated		\$55,910 80
Expended:		
For subsistence of prisoners	\$15,616 50	
For mess savings	2,913 22	
For lard oil and wicking	1,174 37	
For fuel	8,182 79	
For clothing for prisoners in shops	317 17	
For advertising for proposals	32 00	
For hay for bedding	216 58	
For stationery	224 67	
For stores, and miscellaneous stores, drainage, disinfectants, &c.	612 39	
For hats for prisoners at discharge	171 00	
For clothing for prisoners at discharge	738 72	
For donations at discharge	1,275 00	
For apprehension of escaped prisoners	240 00	
For straw hats for prisoners during summer	31 90	
For hose, tools, materials, &c., for use in shops, repair of transportation, cleaning and repair of machinery	3,857 46	
For tobacco for prisoners	399 77	
For pay of foremen, mechanics, and watchmen	7,867 50	
For pay of teamsters	1,800 00	
For pay of clerks	3,199 92	
For extra-duty pay of guard	486 00	
For paving-brick and stone for coping of wall	1,280 44	
For extension and repair of building	4,226 15	
For medical supplies	1,047 25	
		<hr/> 55,910 80

I wish to call attention to the fact that a considerable portion of the appropriation has been expended in permanent improvements, extension of buildings, &c.

The conduct of the prisoners has, on the whole, been very good, but

few refractory cases, necessitating severe disciplinary measures, occurring.

Sixteen prisoners escaped; ten were recaptured, making a loss of six. The last three prisoners escaping from here did so while being guarded by a detachment of the Nineteenth Infantry.

The health of the institution, as shown by the inclosed report of the surgeon, has also been very good, considering the crowded condition of the dormitories, but three deaths occurring during the year, one of which was a prisoner, and two enlisted men—Hospital Steward Hartford T. Clarke, U. S. A., and Private Henry Rottmayer, provost guard, general service, U. S. A.; cause, pulmonary consumption and acute dysentery.

I desire to take this opportunity to acknowledge my sincere thanks to the department commander for his kind encouragement and substantial support which he has extended to me during the past year, and I am sure that whatever success has attended my labors here has been largely due to the aid he has given me in the performance of my duties.

It is also gratifying to me to acknowledge my obligations to the different officers on duty at the prison for the manifest interest they have taken in the performance of their arduous duties, their hearty co-operation, and exemplary conduct.

I am, sir, very respectfully, your obedient servant,

A. P. BLUNT,
Brevet Colonel, U. S. Army, Governor.

[First indorsement.]

HEADQUARTERS DEPARTMENT OF THE MISSOURI,
Fort Leavenworth, Kans., July 23, 1881.

Respectfully forwarded to the Adjutant-General of the Army.

JNO. POPE.
Brevet Major-General, Commanding.

OFFICE OF ACTING ASSISTANT QUARTERMASTER,
UNITED STATES MILITARY PRISON,
Fort Leavenworth, Kans., July 13, 1881.

To the GOVERNOR OF UNITED STATES MILITARY PRISON,
Fort Leavenworth, Kans. :

SIR: I have the honor to report that I have been on duty at this station during the fiscal year ending June 30, 1881, per Special Orders No. 95, par. 5, dated Headquarters Department of the Missouri, May 14, 1879, and have performed the duties of acting assistant quartermaster and acting commissary of subsistence at this prison per orders No. 15, dated Headquarters United States Military Prison June 6, 1879.

I was absent from this station taking a prisoner to the insane asylum at Washington, D. C., per orders No. 68, dated United States Military Prison, Fort Leavenworth, Kans., December 11, 1880, from December 12 to 21.

The transportation (horses, mules, wagons, &c.) on hand is all in good condition. During the fiscal year 1,368½ cords of wood purchased and 251 cords received from depot were used for heating purposes and making steam for running machinery; 48,415 pounds of hay were used for prisoners' bedding.

There were made at prison tailor-shop, and issued, 319 pair trousers, duck, 71 jackets, duck, and 255 citizens' suits of clothing for discharged prisoners, the material for which was purchased; 202 straw hats, 407 pairs socks, and 255 citizens' hats were purchased and issued.

The following clothing and camp and garrison equipage was issued during the year: 59 felt hats; 254 campaign hats; 737 forage caps, old pattern; 18 great coats, mounted, old pattern; 91 great coats, old pattern; 50 great coats, foot, double cape, old pattern;

210 cavalry jackets, privates', old pattern; 165 uniform coats, privates', old pattern; 64 F. S. coats, unlined, old pattern; 1,014 pairs of trousers, foot, made old pattern; 1,726 shirts, flannel; 1,329 pairs of drawers; 3,099 pairs of stockings; 113 pairs of boots, sewed, old pattern; 30 pairs of boots, pegged, old pattern; 153 pairs of boots, B. S., 14 pairs of shoes, sewed, old pattern; 977 pairs of shoes, pegged, old pattern; 259 pairs of shoes, B. S., and 158 blankets, woolen, old pattern.

Issued for policing purposes, &c.: 30 axes, 56 ax-helves, 72 pick-ax helves, 3 guard report-books, 34 hospital tent-pins, large, 30 hospital tent-pins, small, 337 corn brooms, and 82 scrubbing brushes.

The following number of rations were issued during the year: 40,124 pork, 100,805 beef, 140,929 flour, 73,117 beans, 67,812 rice, 140,929 coffee, 140,929 sugar, 140,929 vinegar, 140,929 soap, 140,929 salt, 140,929 pepper, 836 pounds of tobacco, and for illuminating purposes 1,714 $\frac{1}{2}$ gallons of lard oil; average cost of ration, 13.148 cents.

Respectfully submitted.

F. L. DODGE,
First Lieutenant, Twenty-third Infantry, A. A. Q. M. and A. C. S.

OFFICE OF THE ATTENDING SURGEON,
UNITED STATES MILITARY PRISON,
Fort Leavenworth, Kans., July 16, 1881.

To the GOVERNOR OF THE MILITARY PRISON:

SIR: I have the honor to report that the health of the provost guard and military prisoners has been satisfactory during the past year. On the 7th of June Hospital Steward H. T. Clarke, U. S. A., died after a brief illness, of acute dysentery. Steward Clarke had been on duty at this prison since its establishment. He discharged his duties with fidelity, and was a very deserving man. One death occurred among the members of the provost guard. This soldier died very suddenly of valvular disease of the heart, and had not been on sick report. One prisoner died of fibroid phthisis. This man had long been an invalid, and his discharge was recommended and was ordered; but the order was not received until after his decease.

Eleven prisoners have been discharged on certificates of disability during the year. These cases were in all instances incurable, and of such a nature that release from confinement was necessary to prolong life.

The diseases of greatest prevalence have been malarial in type and such as are classified generally as catarrhal—either of the respiratory organs or of the alimentary canal. The diet and general hygienic condition of the prisoners are satisfactory. No contagious diseases, excepting a few cases of measles, have prevailed during the year. Liberal supplies of vegetables and other antiscorbutics are available, and are furnished the prisoners habitually. The hospital building is complete in all its appointments, and is large enough to meet the demands upon it.

From time to time prisoners are received here in a condition of chronic invalidism, and in such cases I have recommended their discharge, as otherwise the hospital accommodations would be inadequate to meet the demands.

Very respectfully, your obedient servant,

J. P. WRIGHT,
Surgeon, U. S. Army.

Annual report of the chaplain of the United States Military Prison for the year ending June 30, 1881.

To the GOVERNOR:

SIR: In presenting this my fifth annual report, I have the honor to state that while the prison during the past year has presented few characteristics different from former years, there has been a steady advance in my department, as there certainly has been in all that pertains to the material interests of the institution. In the nature of the case it is even a difficult matter to make a correct estimate as to what has been accomplished in a sphere of labor such as mine, yet there have been cases during the past year which give hope that my labors in behalf of these unfortunate men have not been in vain. At all events, I have striven to do what I could to bring them to a knowledge of "the truth as it is in Jesus," and to point them to Him as the only Savior from sin, from its bondage and power, as well as from its consequences. The gospel is the only instrumentality by which these results can be effected, and by which our depraved natures can be restored to true manhood, and this I have endeavored to present in all its simplicity and power, trusting in divine grace to give it efficacy.

It may not be out of place in this my last report to take a brief survey of what has

been accomplished during the period of my connection with the prison. When I entered upon my duties, I found that while the spiritual interests of the prisoners had not been entirely neglected, there was no systematized efforts in their behalf. The work before me was new, and there were many obstacles in the way of inaugurating such a system of labor as I desired. There was no chapel in connection with the prison, in fact for nearly three years not even a suitable place in which to conduct religious services. The attendance was comparatively small, and the interest manifested by no means encouraging. Now we have a comfortable and commodious place of worship, and the attendance is very gratifying, nearly one-fourth of the men being habitually present on the Sabbath, and constituting as respectful and interested a congregation as can be found anywhere. Until a year ago we had no library worthy of the name. Now we have a library of nearly 800 carefully selected volumes, embracing almost every department of literature. The books are eagerly sought after by the men, and of course cannot but exercise a salutary influence over them.

Although we have not as yet been able to organize a school, still the work of education among the prisoners is not entirely neglected, text books and writing material being furnished to those who desire them, while competent instructors from their own numbers, are readily found to assist those who are desirous of learning.

And now, after nearly five years of service here, my connection with this institution is about to cease. I am deeply sensible of the imperfect manner in which I have discharged my duties, yet I can say with truth that there has been no intentional neglect of duty at any time. My labors and associations have been, in the main, pleasant. Whatever has been otherwise shall be forgotten, while the many kindnesses received from yourself and my brother officers shall be cherished as among the most pleasant memories of my life.

Very respectfully, your obedient servant,

A. D. MITCHELL,
Chaplain.

Date.	In prison.		Gain.		Loss.						Sentences mitigated.				
	Aggregate.	Aggregate last report.	By transfer.	From escape.	Aggregate.	Discharged.			Transferred.			Escaped.	Died.	Aggregate.	
						By expiration of term of sentence.	By order.	On surgeon's certificate of disability.	To penitentiary.	To insane asylum.					
July 31, 1880.....	336	332	27	.....	27	12	3	.....	.....	.....	.....	.....	.....	15	20
August 31, 1880.....	376	342	40	1	41	23	2	1	.....	.....	.....	5	.....	31	5
September 30, 1880.....	375	333	18	2	20	16	.....	2	.....	.....	.....	3	.....	21	6
October 31, 1880.....	357	337	14	1	15	29	1	1	.....	.....	.....	2	.....	33	12
November 30, 1880.....	374	336	35	2	37	16	.....	.....	.....	.....	.....	2	.....	20	3
December 31, 1880.....	391	317	38	1	39	19	2	.....	.....	.....	.....	.....	.....	22	5
January 31, 1881.....	382	333	9	1	10	15	2	1	.....	.....	.....	1	.....	19	4
February 28, 1881.....	399	342	33	2	35	17	.....	.....	.....	.....	.....	.....	.....	18	1
March 31, 1881.....	398	354	27	.....	27	23	4	1	.....	.....	.....	.....	.....	28	2
April 30, 1881.....	407	344	32	.....	32	18	4	1	.....	.....	.....	.....	.....	23	4
May 31, 1881.....	430	360	39	.....	39	14	1	1	.....	.....	.....	.....	.....	16	3
June 30, 1881.....	447	354	51	.....	51	23	3	3	.....	1	34	3	1	84	8
	4,702	4,084	363	10	373	225	24	11	.....	3	280	16	1	73	

RECAPITULATION.

In prison June 30, 1880.....	354
Received since.....	373
	727
Discharged by expiration of sentence.....	225
Discharged by order.....	24
Discharged by surgeon's certificate.....	11
Transferred to asylum.....	3
Died.....	1
Escaped.....	16
	280
Remaining in prison June 30, 1881.....	447

PRISON LABOR PERFORMED

Date.	For depot quartermaster.			General police.	In prison yard.		In prison workshops.			Outside prison yard.			Total number of days' labor.		Aggregate number of days' labor performed during the month.
	Headquarters Department of the Missouri, laborers, number of days.	Depot quartermaster, mechanics, number of days.	Depot quartermaster, laborers, number of days.		Mechanics, number of days.	Laborers, number of days.	Shoe-shop, mechanics, number of days.	Harness-shop, mechanics, number of days.	Broom-shop, mechanics, number of days.	Quarry laborers, number of days.	Prison mechanics, number of days.	Wall laborers, number of days.	Mechanics, number of days.	Laborers, number of days.	
July 31, 1880	295	8	630	58	1,069	2,177	2,514	.....	.....	805	156	960	8,789	5,425	9,164
August 31, 1880	294	.....	661	62	1,055	2,165	2,692	.....	.....	162	156	935	8,811	5,179	8,990
September 30, 1880	298	4	1,119	60	1,131	2,136	2,049	.....	.....	104	145	903	8,929	6,619	9,548
October 31, 1880	299	.....	1,062	62	1,149	2,000	2,630	412	.....	.....	177	795	8,978	5,116	9,899
November 30, 1880	296	.....	1,742	60	1,063	2,459	2,111	409	.....	.....	.....	590	8,642	5,147	8,789
December 31, 1880	351	.....	1,181	52	923	2,303	2,178	490	50	.....	.....	506	8,060	5,498	9,148
January 31, 1881	343	.....	1,774	45	1,028	2,028	2,019	468	249	.....	.....	424	8,785	5,234	8,989
February 28, 1881	324	.....	762	28	1,005	2,494	1,914	486	205	.....	.....	1,325	8,610	4,958	8,663
March 31, 1881	303	.....	1,146	32	1,030	2,103	2,362	609	.....	.....	.....	1,676	8,861	6,320	10,251
April 30, 1881	350	.....	1,718	29	978	2,871	2,185	557	.....	.....	.....	1,131	8,720	6,089	9,819
May 31, 1881	343	81	2,428	34	1,045	3,196	2,357	119	.....	.....	.....	550	8,602	6,541	10,148
June 30, 1881	360	66	2,415	59	1,267	3,409	2,351	52	13	.....	.....	740	8,749	6,978	10,729
	8,916	159	15,608	571	32,732	26,931	27,712	2,003	526	571	634	10,404	45,426	68,091	113,517

NOTE.—Average number of prisoners employed daily throughout the year, 306 working days:

Mechanics	147 1/2
Laborers	221 1/2

Respectfully submitted.

A. P. BLUNT,
Brevet Colonel, U. S. A., Governor.

UNITED STATES MILITARY PRISON,
Fort Leavenworth, Kans., July 21, 1881.

**REPORT OF THE BOARD OF COMMISSIONERS OF
THE SOLDIERS' HOME.**

R E P O R T
OF THE
BOARD OF COMMISSIONERS OF THE SOLDIERS' HOME.

WASHINGTON, D. C., *November 3, 1881.*

To the Hon. SECRETARY OF WAR:

SIR: In obedience to a requirement of the regulations for the Soldiers' Home, I have the honor to submit the following report for the year ending September 30, 1881:

The commissioners have visited the Home and audited the accounts of the treasurer regularly, as required by law.

No additions have been made to the property by purchase or building during the year, and no expenses have been incurred except such as were necessary for the support of the inmates and the improvement or preservation of the buildings and grounds.

The management has been satisfactory and the duties devolving upon the officers have been properly performed. These duties have been during the past year probably more regular and routine in character, because of the absence of any of the special work in building and other new improvements which has demanded attention in previous years, but they have been nevertheless none the less important and responsible. The admissions of inmates have increased in number and the attention and care required have increased in proportion. This is particularly manifest in the matter of maintaining proper discipline. In the last annual report the fact was stated that pensioners who have contributed to the funds of the Home by the payment of twelve and one-half cents a month during their service in the Army now receive their pensions, instead of relinquishing them to the Home while they receive its benefits. In addition to the current payments on this account to pensioners, a great majority have had refunded to them by the United States a sum equal to their accrued pensions for a period of about four years. This money has been the means of bringing much damage to its possessors and much discredit upon the institution in which they have been kept. Many of them have either voluntarily forfeited their rights or have lost them as subjects of discipline, and have become burdens upon communities, in which the "Soldiers' Home" is judged according to the apparent evidences of neglect they witness in their midst. While inmates receive money in any considerable sums there will be no remedy for this state of things, and the strong measures adopted to restrain those who waste their means for intoxicating liquor will continue to be a hardship to those who are peaceable and well disposed.

In procuring the supplies for daily consumption the regulations governing purchases for the Army are observed as far as practicable. An abundance of good food well prepared and a sufficient supply of com-

fortable clothing are furnished. Each inmate has a single bed and is provided with a locker for his personal property and apparel. The rooms are kept perfectly clean and well ventilated, and the conveniences for all natural wants are as complete as circumstances will permit. All have access to a good library, and the current periodicals are regularly received. One of the inmates is employed to read for those who cannot read for themselves. The sick and infirm are cared for in a well-appointed hospital under the charge of an experienced medical officer.

Farming operations have been confined mainly to the production of fruits and vegetables, of which a good supply is raised, though not sufficient in quantity of the latter, and the deficiency is made up by purchase.

The officers of the Home who were relieved by the present detail at the close of the last fiscal year completed a most satisfactory tour of duty in their respective positions, and it is with gratification that this record of commendation is made.

The officers now on duty are :

Col. Samuel D. Sturgis, Seventh Cavalry (brevet major-general), governor.

Lieut. Col. John S. Mason, Twentieth Infantry (brevet brigadier-general) deputy governor.

Capt. Jonathan D. Stevenson, Eighth Cavalry, secretary and treasurer.
Assist. Surg. Calvin DeWitt, attending surgeon.

The officers relieved are:

Col. Joseph H. Potter, Twenty-fourth Infantry (brevet brigadier-general), as governor.

Maj. Milton Cogswell (brevet colonel, retired), as deputy governor.

Maj. Joseph H. Whittlesey (retired), as secretary and treasurer.

Surgeon David L. Huntington, as attending surgeon.

The register of inmates shows that during the year there were:

Receiving the benefits of the Home September 30, 1880.....	550
Admitted between October 1, 1880, and September 30, 1881:	
Regular.....	153
Temporary.....	68
Readmitted.....	77
	— 848
Dropped by voluntary withdrawal, for absence without leave, &c.:	
Regular.....	120
Temporary.....	66
Dismissed, regular.....	10
Died, temporary.....	1
Died:	
Regular.....	43
Temporary.....	3
Suspended.....	17
	— 260
	—
Receiving the benefits September 30, 1881.....	588

Included in the 68 men temporarily admitted are 37 who were received as soldiers entitled to become inmates, and who were regularly admitted on receiving their discharges from the Army.

I have the honor to be, sir, very respectfully, your obedient servant,
J. K. BARNES,
Surgeon-General, U. S. Army,
President of the Board of Commissioners.

**REPORT ON THE STATE, WAR, AND NAVY
DEPARTMENT BUILDING.**

R E P O R T
ON
CONSTRUCTION OF STATE, WAR, AND NAVY DEPARTMENT
BUILDING, 1881.

**OFFICE OF BUILDING FOR STATE, WAR,
AND NAVY DEPARTMENTS, OLD BUILDING,
NAVY DEPARTMENT, SEVENTEENTH STREET,
Washington, D. C., July 1, 1881.**

SIR: I have the honor to submit the following report of operations pertaining to the construction of the building for State, War, and Navy Departments, in my charge, for the fiscal year ending June 30, 1881:

The east wing of the building having been entirely completed during the last fiscal year, operations were confined exclusively to the north wing. At the close of the year ending June 30, 1880, as shown by the last annual report, the work, which had been proceeding slowly for some weeks for want of funds, was nearly suspended, and the supply of materials practically exhausted.

An appropriation of \$450,000 for the north wing was made by act of Congress approved June 16, 1880, but owing to the facts that much of the material required, consisting of manufactured iron and cut granite, could not be contracted for until funds were available; that considerable time was necessarily consumed in the preparation of those materials, and that the iron-work was the first needed before the work could go on, operations on the building could not be resumed with any vigor until September 23, 1880. Even then, but few parts of the work could be carried on simultaneously, as it was necessary to complete some floors and interior walls to enable the derricks to be raised into advanced positions for the handling of the stone.

After two or three weeks, however, the work moved along with system, and good progress was made up to November 22 with both the stone and brick masonry, including the combined iron-work. At this time freezing weather set in, which suspended the masonry for some days, and, with the exception of one or two weeks of mild weather suitable for laying masonry, was succeeded by one of the severest winters of this latitude, effectually closing, on the 20th of December, all operations upon the building.

The object of pushing the masonry work so late in the season was to fit the building for the iron-work of the roof, for which the contractors had prepared much of the material, expecting, according to the terms of their contract, to erect it during the winter. The weather, however, rendered all such out-door work impracticable, and it was necessarily deferred until spring.

On February 23, 1881, the last of the stone for the court-yard walls of this wing arrived at the building.

On March 28, 1881, the weather having become well settled, opera-

tions were resumed; but some loss of time was still suffered in the early part of April from unfavorable weather.

On May 4, the erection of the iron-work of the roof was commenced, and has progressed rapidly ever since. Being necessarily a complicated structure, due to the architectural form of this wing of the building, considerable time, some three months, will be consumed in its construction.

On June 11, 1881, the last cut stones for this wing, being the last stones wanted for the wing, exclusive of the approaches, were delivered at the building, and the work of setting the granite masonry was completed on the 25th of that month.

At the close of the fiscal year the condition of the work is as follows:

The approaches have not been commenced, but, exclusive of this work, all the stone masonry is finished, and the same is practically true of the brick-work, only a piece of wall and floor in the attic and the backing of the mansards now remaining to be done.

The iron-work of all the roof excepting the part covering the center pavilion, which is in process of erection, is finished and ready to receive its covering of concrete, cement, and copper, and the slating of the mansards. The latter work was commenced on the 27th of June last, and is now in progress.

Throughout the interior of the building, all the walls, openings, brick-arched floors, and stairway wells are complete and ready for the cast-iron finish for doors and windows, and also for the granite stairways and heating apparatus to be put in place. Contracts for the prepared materials for all of these classes of work have been made, and the materials are to be delivered after July 1, 1881, when the new appropriation becomes available.

The following contracts were entered into and in force during the year:

Date of contract.	Subject of contract.	Contractor.	Amount.	Present condition.
1880				
Mar. 19	Cement.....	J. G. & J. M. Waters....	88 cents per barrel.	Completed.
Apl. 10	Sand.....	John B. Lord.....	75 cents per cubic yd	Do.
June 18	Cut granite for third story front.	Albert Ordway.....	\$130,000.....	Do.
18	Cut granite to complete court-yard wall.	Bodwell Granite Company.	\$17,000.....	Do.
July 2	Bricks.....	Washington Brick Machine Company.	\$6.43 per M.....	Do.
7	Cut granite to complete fourth and attic stories.	Albert Ordway.....	\$70,000.....	Do.
8	Cast-iron columns and pilasters.	J. B. & J. M. Cornell.....	\$7,344.....	Do.
9	Plate-iron girders.....	J. B. & J. M. Cornell.....	3.95 cents per pound	Do.
10	Small iron castings.....	Geo. White & Co.....	\$712.....	Do.
10	Cement.....	J. G. & J. M. Waters....	85 cents per barrel..	In force.
10	Sand.....	John B. Lord.....	70 cents per cubic yd	Do.
15	Rolled-iron beams.....	J. F. Bailey & Co.....	2.05 cents per pound	Do.
Nov. 5	Iron-work of roof, &c.....	J. B. & J. M. Cornell....	\$71,380.....	Do.
1881.				
May 5	Cut granite for stairways	Concord Granite Company.	\$15,984.....	Do.
9	Boilers, tanks, &c., for heating apparatus.	Bartlett, Hayward & Co.	\$7,108.....	Do.
9	Cast-iron flange pipe, &c., for heating apparatus.	.....do.....	\$12,448.....	Do.
9	Fittings, valves, &c., for heating apparatus.	.....do.....	\$8,698.....	Do.
10	Cast-iron door and window finish and wash-boards.	Joseph Hall & Co.....	\$47,711 for doors and windows. 65 cents., 80 cents, \$1 and \$1.50 per ft. of wash-boards.	Do. Do.
June 3	Iron furring, lathing, and partitions.	Dwight & Hoyt.....	\$11,567.45 (est.).....	Do.

Date of contract.	Subject of contract.	Contractor.	Amount.	Present condition.
1881. June 6	Wrought-iron pipe..... Sheet-copper and iron.....	National Tube Works. C. G. Hussey & Co.....	\$2,033..... 29 cents, 35 ¹¹ / ₁₆ cents, 38 ¹⁸ / ₁₆ cents, and 31 cents for copper, rivets, and burrs, and 7 cents per pound for iron.	In force. Do.
27	Lumber for floors	E. E. Jackson & Co.....	\$45 and \$35 per M...	Do,

PROBABLE OPERATIONS FOR FISCAL YEAR 1881-'82.

During the months of July, August, and September, 1881, it is expected to introduce and complete the heating and steam apparatus, and to entirely finish the roof of the building.

The placing of the cast-iron frames, casings, and finish for the windows and doors, and the cast-iron wash-boards, will be commenced in July, and completed on January 1, 1882.

The two granite stairways will be built during the autumn of 1881, and at the same time all the fire-proof lathing, light iron partitions, and gas-piping will be put in place.

It is expected that the plastering and stucco work, requiring several months' time in execution, will be commenced on December 1, 1881, and that the plumbing work will be done during the early part of the winter.

During the spring and summer of 1882 it is expected that the floors and tiling and much of the painting will be finished, so that by the fall of 1882 but a comparatively small amount of work, pertaining partially to the painting, decoration, gas-fixtures, elevator, mantels, doors, clearing out, and cleaning down the exterior walls of the building, occupying perhaps two or three months' time, will be required to make the building entirely ready for occupancy.

At that time, however, it is believed that the approaches, if commenced at all, cannot be more than partially finished, owing to want of funds at the present time with which to make the necessary preparations, and the improbability that another appropriation will be made before the middle of the summer of 1882.

STATEMENT OF FUNDS.

Total amount expended to date on north wing	\$1,363,786 49
Balance on hand, including new appropriation of \$450,000, available this date	514,194 11
New appropriation desired to complete the north wing and approaches.	100,000 00

WEST AND CENTER WINGS.

As no appropriations have been made for those parts of the building, no work has been done looking to the preparation of the materials—a labor requiring much time.

At least a year should be devoted to the collection of the granite for the exterior walls before commencing the foundations. An estimate of \$450,000 for these parts of the building is submitted, to be used in the preparation of materials, which sum, if granted, will enable ground to be broken for the foundation in the spring of 1883.

THOS. LINCOLN CASEY,

Lieutenant-Colonel, Corps of Engineers, U. S. A., in charge.

Hon. ROBT. T. LINCOLN,
Secretary of War.

REPORT ON EDUCATION IN THE ARMY.

REPORT
ON
EDUCATION IN THE ARMY.

OFFICE CORNER FOURTH AND ELM,
Saint Louis, Mo., November 1, 1881.

ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C.:

GENERAL: I have the honor to transmit herewith to the honorable Secretary of War my annual report on the subject of education in the Army; also an exhibit of grants obtained, of which I gratefully desire to make honorable mention.

Very respectfully, your obedient servant,

GEO. G. MULLINS,
Chaplain, Twenty-fifth Infantry, in Charge of Education in the Army.

SAINT LOUIS, MO., *November 1, 1881.*

The honorable the SECRETARY OF WAR,
Washington, D. C.:

(Through the Adjutant-General of U. S. Army.)

SIR: I have the honor to render my annual report on the subject of education in the Army.

Since assuming charge of this work most of my time has been devoted to gathering data and information from reports and by informal correspondence with officers throughout the Army, so that I might understand the actual condition and need of the Army. The work is as yet in chaos, and no great progress has been made; but we have made a beginning which promises, through intelligent method and persistent toil, to lead to a noble success in the future.

A large number of officers have evinced a lively interest in the subject and have been very kind and helpful in giving valuable information and suggestions.

The opinion is entertained that through this educational enterprise the enlisted man may at last be given that incentive and diversion so long and generally felt to be a pleading necessity in time of peace.

As to the number of buildings constructed during the current year for school and religious purposes I have not been advised; and am unable to state how many posts are still without suitable buildings for such purposes.

Thirty-eight posts report "no facilities for school."

The reading-rooms established in most of the posts, and supplied with reading matter by the Quartermaster-General's Department and by

generous contributions from various benevolent societies, have already become a very pronounced success, and are popular both with officers and enlisted men. The approximate average daily attendance of enlisted men upon the reading-rooms has been 4,800.

The following is an exhibit of the average number of pupils who attended the schools in operation at the military posts during the year :

Enlisted men.....	912
Children of—	
Enlisted men	850
Officers	224
Civilians	316
	<hr/>
Total average number.....	2,302

I find that there is a great want of libraries in the Army. Very few posts have good libraries; many have none at all; some not even an unabridged dictionary.

Inasmuch as the recognized libraries now are post libraries, and are fixtures at the posts, it is respectfully recommended that some arrangement be made whereby the few existing regimental libraries may be purchased for the posts.

I have the honor to call the attention of the Hon. Secretary of War to the difficulties met with in the effort to supply competent teachers for the post schools from the enlisted men of the Army. A soldier detailed for teacher in the post school now receives only thirty-five cents per diem extra pay, and is subject to all military duty (garrison or field), or such duties as may be prescribed by his post commander; and we have numerous instances where the teachers have been taken out of the schools and sent to the field with their companies, in which case the schools were broken up. This necessarily causes much inconvenience, loss of time, and almost destroys the interest which should characterize the subject of education in the Army.

While we have law for the establishment of schools, we have not adequate means provided to fulfill the evident intention of the law. There should be a distinct class of enlisted men for teachers, and an annual appropriation for the purchase by wholesale of books and school supplies.

It is respectfully and earnestly recommended that a law be passed by Congress authorizing the enlistment into the Army of the United States of one hundred and fifty young men to be rated as schoolmasters, with the rank and pay of commissary sergeant.

A mighty forward impulse would be given to the schools could the standard of attainments necessary for the non-commissioned officer be elevated; and it is respectfully recommended that a standard of education for non-commissioned officers be adopted, and then that all corporals and sergeants be compelled to attend school until educated up to that standard, or be required to show certificates witnessing that they have passed a satisfactory examination upon the prescribed standard.

I have been surprised to find that there are some sergeants who can neither read nor write; many non-commissioned officers who can do but little more.

The advanced science and art of modern warfare surely demands a higher standard, since the requisite quick intelligence and sound judgment cannot be expected, as a rule, of the ignorant.

My observation and study incline me to think that the companies and troops in which men are discontented, which have largest number of cases before general and garrison courts-martial, and from which there